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TRANSCRIPT OF RECORD

Supreme Court of the United States

OCTOBER TERM, 1945 6

No. 410 28

ALPINE MACGREGOR, PETITIONER,

vs.

WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY

ON WRIT OF CERTIORARI TO THE SUPREME COURT OF THE STATE OF PENNSYLVANIA

PETITION FOR CERTIORARI FILED SEPTEMBER 7, 1945.

CERTIORARI GRANTED NOVEMBER 5, 1945.

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1945

No. 410

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WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY

ON WRIT OF CERTIORARI TO THE SUPREME COURT OF THE STATE OF PENNSYLVANIA

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[fol. 1]

IN THE COURT OF COMMON PLEAS OF ALLEGHENY COUNTY, PENNSYLVANIA

April Term, 1942 "D"

No. 1776

WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY, a Corporation,

vs.

ALPINE MACGREGOR

APPEARANCE DOCKET ENTRIES

February 17, 1942, Summons in "Assumpsit" returnable to the 1st Monday of March, 1942. Statement and Affidavit filed.

March 4, 1942, Writ returned, showing Writ and Statement served on Defendant personally on February 25, 1942.

March 12, 1942, Motion presented in open Court, and a Rule granted to show cause why the motion to dismiss for lack of jurisdiction of the Court should not be granted, returnable sec. leg.

April 25, 1942, Praecipe for argument List filed.

May 5, 1942, After argument, Rule is discharged and defendant hereby granted 15 days within which to file an affidavit of defense to the Statement of Claim.

[fol. 2] May 18, 1942, Defendant's answer filed with service accepted May 18, 1942, by Attorney for Plaintiff.

August 10, 1942, Praecipe for Issue filed, 1673.

March 5, 1943, The foregoing stipulated Amendment to Defendant's Answer, set off, and Counter Claim is hereby approved.

March 12, 1943, Plaintiff reply presented in open Court and ordered filed.

April 12, 1943, It is hereby ordered that the Testimony be transcribed and filed of Record. Eo die Testimony Lodged.

April 26, 1943, Testimony filed.

July 7, 1943, Amendments to Plaintiff's requests for findings of fact and conclusions of law filed. Eo die Plaintiff's requests for findings Of Fact and conclusions of law filed. Eo die Findings of Fact, discussion, conclusions of law and

order of court filed. Eo die the Prothonotary of the Court is directed to give forthwith to the parties or their attorneys, notice of this decision, and if no exceptions thereto are filed in the said Prothonotary's Office, within thirty days, after service of such notice, judgment shall be entered thereon by the said Prothonotary conformably to the within conclusion of Law No. 17. Eo die, exception noted to defendant and bill sealed.

July 8, 1943, Proof of Service of Notice filed.

July 28, 1943, Exceptions to Findings of Fact, Conclusions of Law and Order of Court filed showing service accepted by Attorney for Plaintiff.

July 31, 1943, Praecipe for Argument List filed.

[fol. 3] November 27, 1943, Praecipe for Argument List filed.

December 4, 1943, Praecipe for Argument List filed.

January 24, 1944, Exceptions ex parte defendant to findings of fact, conclusions of law, and Order of Court are dismissed. The Prothonotary is directed to enter Judgment ordering and directing that the defendant render an account to the Plaintiff (a) for all sales of brazing solders containing tin manufactured, and since January 1, 1940, to the date of such accounting, sold by the defendant, all such solders being covered by U. S. Letters, Patent, No. 1,651,709; issued by the United States Patent Office to the plaintiff, as assignee and (b) for all sales of brazing, solders containing silver manufactured, and, since November 16, 1937, to the date of such accounting, sold by the defendant, all of same being covered by said U. S. Letters Patent No. 1,651,709; that the plaintiff have the right to inspect the books and papers of the defendant; and that such account be rendered by the defendant within thirty (30) days from the date of judgment. Eo die, Exception noted to defendant and Bill sealed. Eo die Opinion filed.

January 31, 1944, Certiorari in appeal ex parte Defendant to Supreme Court filed.

February 19, 1944 Notice and acceptance of service filed January 24, 1944, Judgment entered in favor of the Plaintiff and against the Deft. in conformity with the order of [fol. 4] court made and entered January 24, 1944.

From the Record.

David B. Roberts, Prothonotary, by S. A. Fritz, Deputy. (Seal.)

IN COURT OF COMMON PLEAS

STATEMENT OF CLAIM—Filed February 17, 1942

The plaintiff claims of the defendant damages upon a cause of action whereof the following is a statement.

1. Plaintiff, Westinghouse Electric & Manufacturing Company, is a corporation organized and existing under the laws of the Commonwealth of Pennsylvania, having its principal place of business at East Pittsburgh, Pennsylvania, and is engaged in manufacturing and selling brazing solder and other goods in this commonwealth, and elsewhere.

2. Defendant, Alpine MacGregor, is an individual, a resident of the County of Allegheny and Commonwealth of Pennsylvania, residing at 272 Cascade Road, Borough of Forest Hills, County of Allegheny, Commonwealth of Pennsylvania, and was on March 31, 1937, prior thereto, and continuously since then has been engaged in the manufacture and sale of brazing solder in this commonwealth, and elsewhere.

3. On December 6, 1927, United States Patent No. 1,651,709 issued to plaintiff, as assignee of the inventor therein [fol. 5] named, by which there was granted to plaintiff the exclusive right throughout the United States to make, use, and sell a brazing solder as described and claimed in the said patent, and to practice a method of uniting objects of copper and copper alloys as described and claimed in the said patent, and plaintiff has always been and still is the owner of the said patent and of all rights granted thereby.

4. A true copy of said patent No. 1,651,709 is attached hereto and made a part hereof, as Exhibit A.

5. On or about March 31, 1937, plaintiff filed suit in the United States District Court for the Western District of Pennsylvania, against the said defendant, Alpine R. MacGregor, et al., alleging infringement of the said patent No. 1,651,709 by the said MacGregor.

6. Prior to the filing of the said suit in the United States District Court for the Western District of Pennsylvania, defendant MacGregor had been making a brazing solder comprising copper, phosphorus, and tin, and a brazing solder comprising only copper and phosphorus, the copper and

phosphorus in both of said solders coming within the range claimed in said patent, and the making and selling of such solders was charged by this plaintiff to be an infringement of the said patent (Exhibit A), and was the subject matter involved in the said litigation.

[fol. 6] 7. Thereafter the said litigation was settled and the said defendant MacGregor entered into a license agreement with plaintiff under date of November 16, 1937, whereby plaintiff granted to the said MacGregor a non-exclusive license during the term of said patent to make, use, and sell brazing solders embodying the inventions covered by said patent No. 1,651,709, and in consideration of that license MacGregor agreed to pay to plaintiff as royalties or license fees, ten per cent (10%) of MacGregor's net selling price of brazing solder embodying the inventions covered by said patent.

8. A true copy of the said license agreement of November 16, 1937, is attached hereto and made a part hereof, as Exhibit B.

9. Plaintiff is informed and believes and therefore avers that subsequent to the execution of the license contract (Exhibit B) the said MacGregor continued to make and sell said brazing solder comprising copper, phosphorus, and tin, and brazing solder comprising only copper and phosphorus, and marked such solders as required in said license contract as coming under the licensed patent, thereby holding out to his customers that he was licensed under said patent, to make and sell such solders, that the said products were covered by the said patent, and thereby derived benefits and advantages from said license and said marking of said solders under said patent.

10. Subsequent to November 16, 1937, and pursuant to the terms of said agreement executed on that date, defend-[fol. 7] ant MacGregor paid royalties at the rate specified in said license agreement to the plaintiff on the said solder containing copper, phosphorus, and tin and on the solder comprising only copper and phosphorus, accounted for his sales thereof, and permitted plaintiff to examine his books pertinent thereto, in accordance with the terms of the said contract, Exhibit B, up until December 31, 1939.

11. Sometime during the early part of 1940 plaintiff's representatives found that the said MacGregor had been

making and calling a solder comprising phosphorus and copper within the range claimed by the said patent with a small amount of silver added, but had not accounted to plaintiff therefor or paid royalties thereon. A demand for accounting and royalty payment on the said copper, phosphorus, and silver solder was made by plaintiff and refused by defendant.

12. Thereafter, on or about April 1, 1941, defendant, through its attorney, notified plaintiff that it would not pay accrued royalties or future royalties upon brazing solder comprising copper, phosphorus, and tin, or upon brazing solder comprising copper, phosphorus, and silver, but would continue to pay royalty on brazing solder comprising only copper and phosphorus.

13. On or about November 11, 1941, duly authorized representatives of the plaintiff went to the office of defendant, and requested permission to examine defendant's books [fol. 8] pertinent to the subject matter of said license agreement and in accordance with the terms thereof. Defendant then and there refused to permit plaintiff's representatives to examine any books or other records showing the manufacture or sale of any brazing solder except that consisting of phosphorus and copper alone, and specifically defendant then and there and at all times since has refused to permit plaintiff to examine its books or other records showing the manufacture and sale of brazing solder comprising phosphorus, copper, and tin, although such solder had been included in a prior examination and royalty had theretofore been paid thereon under the terms of the license; and defendant specifically then and there and at all times since has refused to permit plaintiff's representatives to examine any books or other records showing manufacture and sale of brazing solder comprising copper, phosphorus, and silver.

14. Plaintiff is advised by counsel and therefore believes and avers that defendant's brazing solder comprising phosphorus, copper, and tin, and its brazing solder comprising phosphorus, copper, and silver come within the scope of certain claims of the said patent No. 1,651,709, and therefore within the terms of the said license agreement of November 16, 1937, and that royalty is due and payable upon all such solder that has been made and sold by defendant MacGregor since the date of the said license agreement.

15. Plaintiff is advised by counsel and therefore avers [fol. 9] that there is justly due and owing to it from the defendant an amount equivalent to ten per cent (10%) of the net sales price of all brazing solder manufactured and sold by the defendant and coming within the terms of the said agreement of November 16, 1937, together with interest computed in accordance with said Exhibit B, and that defendant is bound to render an account to the plaintiff thereof; and plaintiff avers that it is unable to state the exact amount due it at this time, as no complete account, being entirely *written* the knowledge of defendant, of the sales of defendant pursuant to the said license agreement has ever been rendered to it by the defendant, as it was the defendant's duty to do and as it has heretofore been requested and has refused to do, and, therefore, by reason of the defendant's failure and refusal to account for it, the plaintiff asks that the Court enter an order upon the defendant to account fully to the plaintiff in the premises, and that the plaintiff may have judgment against the defendant for the amount shown to be due it by such accounting, together with interest as aforesaid.

Smith, Buchanan & Ingersoll, 1025 Union Trust Bldg., Pittsburgh, Pa., by William Booth, Brown, Critchlow & Flick, 1706 First National Bank Bldg., Pittsburgh, Pa., by Jo Baily Brown, Attorneys for Plaintiff.

[fol. 10] *Duly sworn to by J. B. Seastone. Jurat omitted in printing.*

NOTE RE EXHIBIT "B"

Exhibit B, License Contract, attached to the Statement of Claim is identical with Plaintiff's Exhibit No. 2 at p. 195.

[fol. 11] IN COURT OF COMMON PLEAS

SPECIAL APPEARANCE—Filed March 12, 1942

I hereby appear specially for Alpine R. MacGregor, named as defendant in the Statement of Claim entitled as above, solely for the purpose of objecting to the jurisdiction of the Court over said defendant.

William B. Jaspert.

March 12, 1942.

IN COURT OF COMMON PLEAS

MOTION TO DISMISS FOR LACK OF JURISDICTION—Filed March 12, 1942

Now comes Alpine MacGregor through William B. Jaspert, his attorney, appearing specially for this purpose, and moves to dismiss the Statement of Claim in the above-entitled cause for want of jurisdiction of the Court.

By William B. Jaspert, Attorney Appearing Specially for the Purpose of Raising the Question of Jurisdiction.

March 12, 1942.

[fol. 12] ACKNOWLEDGEMENT

Service of copy of the above-entitled motion, attached affidavit and rule acknowledged this 12th day of March 1942.

Smith, Buchanan & Ingeroll, Attorneys for Plaintiff, by William Booth.

AFFIDAVIT IN SUPPORT OF MOTION

STATE OF PENNSYLVANIA,
County of Allegheny, ss:

Alpine R. MacGregor, being first duly sworn, deposes and says as follows:

I am the named defendant in the above-entitled cause and am advised by counsel and therefore believe and aver that the questions raised in the Statement of Claim arose under the patent statutes and can be resolved only by the Federal Courts (Judicial Code, Sec. 274d, 28 USCA Sec. 400).

Alpine MacGregor.

Subscribed and sworn to before me a Notary Public this 9th day of March 1942. Eva G. Scardamalia, Notary Public. My commission expires January 27, 1945. (Seal.)

[fol. 13] IN COURT OF COMMON PLEAS

RULE TO SHOW CAUSE—March 12, 1942

March 12th, 1942, rule granted to show cause why the motion to dismiss for lack of jurisdiction of the Court should not be granted.

Returnable sec. leg.

By the Court, H. B.

IN COURT OF COMMON PLEAS

ORDER DISCHARGING RULE TO SHOW CAUSE—Filed May 5, 1942

Rowand, P. J., Egan, Soffel, JJ.

And now, to wit, May 5, 1942, it is ordered, adjudged and decreed, after argument, that the rule to show cause why the motion to dismiss the statement of claim in the above-entitled case should not be granted be and the same hereby is discharged, and the defendant is hereby granted fifteen days from the date hereof within which to file an affidavit of defense to the said statement of claim.

By the Court, H. R.

[fol. 14] IN COURT OF COMMON PLEAS

Defendant's Answer, Set Off and Counter-Claim—Filed May 18, 1942

DEFENDANT'S ANSWER

Alpine MacGregor, defendant above-named, answers the Statement of Claim of Westinghouse Electric & Manufacturing Company, plaintiff above named, and denies that he is indebted to the said plaintiff in any sum whatsoever, and avers that he has a full, just, true and legal defense to the whole of the plaintiff's alleged claim, as follows:

First. The averments of paragraph first of plaintiff's Statement of Claim are admitted.

Second. The averments of paragraph second of said Statement of Claim are admitted.

Third. The defendant is without knowledge as to the averments of paragraph third of said Statement of Claim and therefore denies the same.

Fourth. The defendant is without knowledge of the averments of paragraph fourth of said Statement of Claim and therefore denies the same.

Fifth. The averments of paragraph fifth are admitted.

Sixth. The averments of paragraph sixth of said Statement of Claim are denied. Defendant denies that the brazing solder comprising copper, phosphorus and tin made by him comes within the range of any claim of plaintiff's pat-
[fol. 15] ent, and denies that plaintiff charged infringement of the said patent by the solder made by defendant comprising copper, phosphorus and tin, and further denies that said solder comprising copper, phosphorus and tin was the subject matter involved in the said litigation.

Seventh. The averments of paragraph seventh of said Statement of Claim are denied insofar as the litigation therein referred to involved the subject matter and issues averred in paragraph sixth of said Statement of Claim. Defendant admits that the litigation was settled; that defendant entered into a license agreement with plaintiff under date of November 16, 1937 granting defendant a nonexclusive license during the term of plaintiff's patent to make, use and sell brazing solder embodying the inventions covered by said patent No. 1,651,709 and admits that defendant agreed to pay plaintiff a royalty of ten (10%) percent of defendant's net selling price of brazing solder embodying the inventions covered by said patent. Defendant denies that the solder comprising phosphorus, copper and tin, or the brazing solder comprising copper, phosphorus and silver, embody the inventions covered by said patent.

Eighth: The averment of paragraph eighth of said Statement of Claim is admitted.

Ninth. The averments of paragraph ninth of said Statement of Claim are denied. In answer thereto, defendant admits that he marked the brazing solder made by
[fol. 16] him with the number of plaintiff's patent (No. 1,651,709). Defendant denies that the license contract required him to mark the solder comprising copper, phos-

phorus and tin with the number of patent 1,651,709, and denies that by marking the brazing solders manufactured by him with the number of patent 1,651,709 he thereby held out to his customers that said solders were licensed under patent 1,651,709, or that said solder was covered by said patent No. 1,651,709, and denies that by such marking he derived benefits and advantages from said license or said patent. Defendant avers that if any of the solder comprising copper, posphorus and tin was marked with the number of patent 1,651,709, such marking was inadvertently done by accident and mistake.

Tenth. The averments of paragraph tenth of said Statement of Claim are denied. For answer defendant avers that the royalties paid by him to the plaintiff on the said solder comprising copper, phosphorus and tin were at the rate, but not under the terms, specified in said license agreement, and were paid by inadvertence, accident or mistake because the license agreement makes no mention of solder containing copper, phosphorus and tin, and therefore defendant was not required to pay any royalty to the plaintiff for solder containing copper, phosphorus and tin. Defendant denies that he was required to account to the plaintiff for his sales of solder containing copper, phosphorus and tin, and denies that he was required to permit [fol. 17] the plaintiff to examine his books with reference to his manufacture and or sale of solder containing copper, phosphorus and tin.

Eleventh. The averments of paragraph eleventh of said Statement of Claim are denied. Defenda-t denies that he made and sold solder containing copper, phosphorus and silver within the range of any claim or claims of said patent No. 1,651,709. Defendant admits that plaintiff's representatives requested the defendant to account to plaintiff and to pay a royalty on the copper, phosphorus and silver solder manufactured and sold by defendant, which defendant refused to do because defendant is advised by counsel and therefore avers that the said solder does not come within the scope of and is not covered by any claims of plaintiff's patent, No. 1,651,709, under which defendant is licensed, and does therefore not come within the terms of the license agreement, Exhibit B.

Twelfth. The allegations of paragraph twelfth of said Statement of Claim are admitted. Defendant admits that

he notified the plaintiff through his attorney that he would not pay any royalties on brazing solders comprising copper, phosphorus and silver because during the prosecution in the United States Patent Office of the application that has matured in plaintiff's patent No. 1,651,709, the inventor did so restrict his claims by especially distinguishing them from brazing solders containing copper, phosphorus and silver that the plaintiff is estopped from now asserting that such brazing solder comes under plaintiff's patent No. 1,651,709; and for further answer to the averments of said paragraph, defendant avers that during the prosecution of the application that has matured in patent No. 1,651,709, the plaintiff so distinguished the invention of patent No. 1,651,709 from the prior art cited by the Patent Office Examiner that it is estopped from asserting said patent, No. 1,651,709, to embrace within its scope solders comprising copper, phosphorus and tin or any solder comprising any materials other than copper and phosphorus, as claimed in said patent. For further answer to the averments of said paragraph, defendant avers that at the time, on or about April 1, 1941, when defendant notified plaintiff that it would not pay future royalties on solders comprising copper, phosphorus and tin and copper, phosphorus and silver, the defendant demanded repayment to him by the plaintiff of the royalties inadvertently paid the plaintiff on defendant's solder comprising copper, phosphorus and tin, in the sum of Six Thousand Twenty-Nine Dollars and Sixty-Four Cents ($6029.64), which demand was refused by the plaintiff.

[fol. 18]

Thirteenth. The averments of paragraph thirteenth of said Statement of Claim are denied. Defendant avers that he has at all times permitted plaintiff's representatives to examine the defendant's books insofar as such examination was pertinent to the subject matter of said license agreement and in accordance with the terms thereof. Defendant denies that plaintiff, under the license agreement, is authorized to examine defendant's records as to the manufacture and sale of brazing solders comprising copper, phosphorus and tin and/or copepr, phosphorus and silver.

[fol. 19]

Fourteenth. The averments of paragraph fourteenth of said Statement of Claim are denied. In answer thereto defendant avers that there is no mention or suggestion in plaintiff's patent No. 1,651,709 or in the claims thereof that

the invention of said patent is for a brazing solder comprising phosphorus, copper and tin or phosphorus, copper and silver, or any brazing solder other than copper and phosphorus only in the proportions stated in said patent and in the claims thereof. Further answering the averments of said paragraph, defendant avers that plaintiff's assertions that the method claims of patent No. 1,651,709 cover the defendant's manufacture and sale of brazing solders, as alleged by the plaintiff in paragraphs third and fourteenth, is an unlawful exercise of the plaintiff's patent monopoly.

Fifteenth. The allegations of paragraph fifteenth as averred are denied. In answer thereto, defendant avers that a full accounting under the license agreement of November 16, 1937, has been rendered the plaintiff in accordance with the terms of said agreement and that there is not now owing to the plaintiff any royalty whatsoever for any brazing solders manufactured and/or sold by the de-
[fol. 20] fendant. Defendant denies that defendant is or ever was indebted to the plaintiff for any sum of money or that the defendan is liable to the plaintiff for an accounting under the license agreement.

Sixteenth. Further answering paragraphs ninth and eleventh specifically, and the remaining averments with reference to defendant's manufacture of solder containing copper, phosphorus and tin, and copper, phosphorus and silver, defendant avers that the copper, phosphorus and tin manufactured by him is covered by defendant's patent No. 2,125,680 granted to him on the 2nd day of August, 1938, and the solder manufactured by defendant containing copper, phosphorus and silver is covered by defendant's patent No. 2,162,627 granted to him on the 13th day of June 1939.

Set Off and Counter-Claim

Alpine MacGregor denies each and every averment of the Statement of Claim in chief and denies that he is indebted to the plaintiff in any sum whatsoever, and on the contrary avers that the plaintiff is indebted to him, the defendant, as follows:

First. The license agreement between plaintiff and defendant executed on the 16th day of November, 1937, grants

unto defendant a non-exclusive right and license to make, use and sell throughout the United States of America, its territories, dependencies and possessions, brazing solders embodying the inventions described and claimed in letters [fol. 21] patent No. 1,651,709. There is no reference in said license agreement, Exhibit B, to solder comprising copper, phosphorus and tin manufactured by the defendant. There is, furtherfore, no reference in said license agreement, Exhibit B, to any solder comprising copper, phosphorus and silver as manufactured by the defendant. There is no reference to a brazing solder comprising copper, phosphorus and tin or copper, phosphorus and silver in either the specification or claims of letters patent No. 1,651,709.

Second. Defendant's solder comprising copper, phosphorus and tin does not come under plaintiff's patent No. 1,651,709. The Patent Office has granted defendant United States Letters Patent No. 2,125,680 describing and claiming the solder containing copper, phosphorus and tin manufactured by defendant and charged by plaintiff to come within the scope of certain claims of patent No. 1,651,709 and within the terms of said license agreement, Exhibit B. Copy of said patent, No. 2,125,680, is hereto attached and marked Exhibit C.

Third. Defendant's solder comprising phosphorus, copper and silver does not come under plaintiff's patent No. 1,651,709. The Patent Office granted to defendant, patent No. 2,162,627 describing and claiming the solder comprising copper, phosphorus and silver manufactured by defendant and charged by plaintiff to come within the scope of certain claims of patent No. 1,651,709, and within the terms of [fol. 22] the license agreement, Exhibit B. Copy of said patent, No. 2,162,627, is hereto attached and marked Exhibit D.

Fourth. The license agreement, Exhibit B, provides, paragraph (2) thereof, that defendant pay Westinghouse Electric & Manufacturing Company a royalty of ten (10%) percent of defendant's net selling price for solders embodying the inventions covered by said letters patent only. There is no provision in the license agreement, Exhibit B, for the payment of any royalties on any solders manufactured or sold by defendant containing tin or silver or other solders embodying the inventions of plaintiff's patent No. 1,651,709.

Fifth. Defendant is advised by counsel that the brazing solder comprising copper, phosphorus and tin does not come within the scope of patent No. 1,651,709 or any claims thereof, and does therefore not come within the terms of said license agreement, Exhibit B. The royalties heretofore paid by defendant to the plaintiff for copper, phosphorus and tin in the sum of Six Thousand Twenty-Nine Dollars and Sixty-Four Cents ($6029.64) were therefore paid by inadvertence, accident or mistake.

Sixth. The plaintiff is informed and believes and therefore charges the fact to be that he has not infringed and is not infringing the beforementioned letters patent; that plaintiff has the right to continue to make, use and sell brazing solders comprising copper, phosphorus and tin un-
[fol. 23] der MacGregor patent No. 2,125,680 and a brazing solder comprising copper, phosphorus and silver under MacGregor patent No. 2,162,627, heretofore made and sold by him without any interference, let, or hindrance by the defendant; that the aforementioned letters patent No. 1,651,709, if construed to cover brazing solders containing tin and silver, is invalid and void because the alleged invention purported to be patented thereby does not constitute patentable knowledge or information within the meaning of the patent laws of the United States in view of the prior state of the art and in view of what was common knowledge of those skilled in the art prior to the time of the alleged invention of the subject matter of the said letters patent by the alleged inventor, such prior art and prior knowledge being shown and described in the following United States and foreign letters patent and publications:

United States Letters Patent

Maxon	532,890
Dandelein	989,573
Canzler et al	1,103,482

Foreign Patents

Heaton (Br) 5,560 of 1892
Universal Metals (Fr) 417,307

[fol. 24] *Publications*

Pages 283 and 284 of "Metallic Alloys" by Gulliver, Published by Chas. Griffin and Co., London, 1913.
Alloys, by Brannt, Baird and Co., Philadelphia, 1896, pp. 466, 470-473.

Seventh. That while the application for said letters patent No. 1,651,709 was pending in the Patent Office, the applicant so limited and confined the claims of such application under the requirements of the Commissioner of Patents that the defendant cannot now seek for or obtain construction of said claims sufficient to cover plaintiff's brazing solder comprising copper, phosphorus and silver. Profert of a certified copy of the file wrapper history of the Jones Patent No. 1,651,709 is hereby made.

Eighth. By letter dated July 11, 1940, plaintiff notified defendant that defendant was obligated under paragraph 5 of the license agreement, Exhibit B, to observe and follow the user price and distribute price lists established by the plaintiff, copy of said letter, distributor price list and user price list being hereto attached, made part hereof and marked Exhibits E, F and G, respectively. That because of the price fixing provisions of said agreement, Exhibit B, it is illegal and a violation of the anti-trust laws, namely, the Sherman Act and the Clayton Act, and constitutes an illegal use of plaintiff's patent monopoly.

[fol. 25] Ninth. That defendant, because of the illegal restraint thus imposed upon it as set forth in paragraph eighth above, has suffered irreparable damage, the amount of which is presently not known to defendant but which defendant hopes to prove at the trial.

Wherefore, defendant, not being liable to plaintiff in any sum, claims to recover from plaintiff and at the trial will demand a certificate for the sum of Six Thousand Twenty-Nine Dollars and Sixty-Four Cents ($6029.64), the amount of royalty inadvertently paid to the plaintiff, plus interest from the dates of payment thereof and three-fold the damage sustained by defendant, together with an amount equal to all costs incurred by defendant in this proceeding, including reasonable attorneys' fees by reason of the injury sustained by defendant to its property and business through

the unlawful monopoly and restraint of trade hereinbefore alleged and described and by reason of accounts and things done and performed by the plaintiff.

Alpine MacGregor.

Duly sworn to by Alpine MacGregor. Jurat omitted in printing.

[fol. 26] IN COURT OF COMMON PLEAS

STIPULATION AND ORDER AMENDING ANSWER—Filed March 5, 1943

It is stipulated by and between counsel for plaintiff and defendant that Defendant's Answer and Set Off And Counter-Claim filed herein be and the same is hereby amended as follows:

Page 4 of the Answer, paragraph Eleventh, fourth bottom line, insert the word "valid" before "claims."

Page 9, paragraph Sixth, lines 1 and 4, change "plaintiff" to "defendant."

Page 10, line 2, change "defendant" to "plaintiff."

[fol. 27] Page 11, paragraph Seventh, line 5 change "defendant" to "plaintiff"; line 6 change "plaintiff's" to "defendant's."

William B. Jaspert, Attorney for Defendant; Brown, Critchlow & Flick, Attorneys for Plaintiff.

February 9, 1943.

ORDER OF COURT

The foregoing stipulated amendment to defendant's answer, set off and counter-claim is hereby approved.

By the Court, T.

Dated: February 5, 1943.

In Court of Common Pleas

Plaintiff's Reply and Order Thereon—Filed Mar. 12, 1943

Plaintiff's Reply

Commonwealth of Pennsylvania,
County of Allegheny, ss:

Now, to wit, this 11th day of March, 1943, before me, a Notary Public in and for the Commonwealth and County aforesaid, personally appeared John B. Seastone, who, being by me first duly sworn according to law, deposes and says that he is manager of the Feeder Engineering Department of Westinghouse Electric & Manufacturing Company, [fol. 28] the plaintiff above named, and duly authorized on its behalf to make this affidavit; that he has knowledge of the matters involved and that the averments of fact contained in this Reply, in so far as made of his own knowledge, are true and correct, and in so far as made upon information received from others, he is reliably informed and verily believes them to be true and correct and so expects to be able to prove at the trial of this case; and that the plaintiff has a full, just, true and legal defense to the whole of the Set-Off and Counter-claim and to the whole of the New Matter (although not denoted as New Matter as required by the Practice Act of 1915) pleaded in the defendant's Answer, the nature and character of which is as follows, to wit:

1. In reply to the averments of paragraph Ninth under the heading "Defendant's Answer" it is denied that if any of the solder comprising copper, phosphorus and tin was marked with the number of patent No. 1,651,709, such marking was inadvertently done, and it is denied that such marking was done by accident, and it is denied that such marking was done by mistake, and it is averred that such marking was done by defendant pursuant to his obligation in such connection under the license agreement of November 16, 1937.

2. In reply to the averments of paragraph Tenth under the heading "Defendant's Answer" it is denied that the royalties paid by defendant to the plaintiff on the said solder comprising copper, phosphorus and tin were not under the

terms specified in said license agreement, and it is denied that the same were paid by inadvertence, and it is denied [fol. 29] that the same were paid by accident, and it is denied that the same were paid by mistake, all for the reason that the license agreement makes no mention of solder comprising copper, phosphorus and tin, and therefore defendant was not required to pay any royalty to plaintiff for solder containing copper, phosphorus and tin, or for any other reason whatsoever; and it is averred that said royalties on solder containing copper, phosphorus and tin were paid by defendant to the plaintiff pursuant to his obligation in such connection under said license agreement of November 16, 1937, and were due and payable under said license agreement and were paid under its terms.

3. In reply to the averments of paragraph Twelfth under the heading "Defendant's Answer" it is denied that during the prosecution in the United States Patent Office of the application that has matured in plaintiff's patent No. 1,651,709, the inventor did so restrict his claims by especially distinguishing them from brazing solder containing copper, phosphorus and silver that the plaintiff is estopped from now asserting that such brazing solder comes under plaintiff's patent No. 1,651,709, and it is denied that the inventor did so restrict his claims in such manner at any other time or times, and it is denied that the inventor did so restrict his claims in any other manner at any time or times, and it is denied that during the prosecution of said application the plaintiff so distinguished the invention of patent No. 1,651,709 from the prior art cited by the Patent Office Examiner [fol. 30] that it is estopped from asserting said patent No. 1,651,709 to embrace within its scope solders comprising copper, phosphorus and tin, and it is denied that plaintiff so distinguished the patent at any other time or times, and it is denied that during the prosecution of said application the plaintiff so distinguished the invention of patent No. 1,651,709 from the prior art cited by the Patent Office Examiner that it is estopped from asserting said patent No. 1,651,709 to embrace within its scope any solder comprising any materials other than copper and phosphorus, and it is denied that plaintiff so distinguished the invention of patent No. 1,651,709 from such prior art at any other time or times; and it is averred that at all times during the prosecution of said application and otherwise, by either the

inventor or the plaintiff, the conduct of the inventor and the conduct of the plaintiff was and has been such as to give rights to no such estoppel against plaintiff as claimed by defendant. It is denied that the royalties in the sum of $6,029.64 were inadvertently paid by defendant to plaintiff, and it is denied that any portion of such royalties were thus inadvertently paid, and it is averred that such royalties in the sum of $6,029.64 were all paid in accordance with and pursuant to the terms of the license agreement of November 16, 1937, and that, accordingly, there was no basis for defendant's demand on plaintiff for the repayment of such royalties or any portion thereof.

4. In reply to the averments of paragraph Fourteenth under the heading "Defendant's Answer" it is denied that [fol. 31] plaintiff's assertions that the method claims of patent No. 1,651,709 cover the defendant's manufacture and sale of brazing solders, as alleged by the plaintiff in paragraphs Third and Fourteenth, is an unlawful exercise of the plaintiff's patent monopoly.

5. In reply to the averments of paragraph Sixteenth under the heading "Defendant's Answer" it is admitted that the solder containing copper, phosphorus and tin manufactured by defendant is covered by defendant's patent No. 2,125,680 granted to him on the 2nd day of August, 1938, and it is admitted that the solder manufactured by defendant containing copper, phosphorus and silver is covered by defendant's patent No. 2,162,627 granted to him on the 13th day of June, 1939. It is averred that whether or not defendant has such patents or either thereof, or any patents covering its said solders, is immaterial to any issue of this case.

6. In reply to the averments of paragraph First under the heading "Set-Off and Counterclaim," it is admitted that defendant is licensed by plaintiff under a nonexclusive right to make, use and sell throughout the United States of America, its territories, dependencies and possessions, brazing solders embodying the inventions described and claimed in Letters Patent No. 1,651,709, and it is admitted that there is no specific reference in said license agreement, Exhibit B, or in either the specification or claims of Letters Patent No. 1,651,709, to a solder comprising copper, phosphorus and tin, or to a solder comprising copper, phos- [fol. 32] phorus and silver, but it is averred that the scope

of the license is co-extensive with the invention described and claimed in said Letters Patent No. 1,651,709 and is not limited otherwise, and that said license and letters patent cover solder comprising copper, phosphorus and tin manufactured by the defendant and solder comprising copper, phosphorus and silver manufactured by the defendant.

7. In reply to the averments of paragraph Second under the heading "Set-Off and Counterclaim" it is denied that defendant's solder comprising copper, phosphorus and tin does not come under plaintiff's patent No. 1,651,709, and plaintiff avers on the other hand that such solder comes under the specification and certain of the claims of said patent. Plaintiff avers that although Letters Patent No. 2,125,680 has been granted to defendant, such patent and its subject matter are immaterial to the issues of this case. Plaintiff admits that United States Letters Patent No. 2,125,680 describes and claims the solder containing copper, phosphorus and tin manufactured by defendant and charged by plaintiff to come within the scope of certain claims of patent No. 1,651,709 and within the terms of said license agreement, Exhibit B.

8. In reply to the averments of paragraph Third under the heading "Set-Off and Counterclaim" it is denied that defendant's solder, comprising copper, phosphorus and silver does not come under plaintiff's patent No. 1,651,709, and plaintiff avers on the other hand that such solder comes [fol. 33] under the specification and certain of the claims of said patent. Plaintiff avers that although Letters Patent No. 2,162,627 has been granted to defendant, such patent and its subject matter are immaterial to the issues of this case. Plaintiff admits that United States Letters Patent No. 2,162,627 describes and claims the solder comprising copper, phosphorus and silver manufactured by defendant and charged by plaintiff to come within the scope of certain claims of patent No. 1,651,709, and within the terms of the license agreement, Exhibit B.

9. In reply to the averments of paragraph Fourth under the heading "Set-Off and Counterclaim" it is admitted that the license agreement, Exhibit B, provides in paragraph (2) thereof that defendant pay plaintiff a royalty of 10% of defendant's net selling price for solder embodying the inventions covered by said letters patent. It is denied that

there is no provision in the license agreement, Exhibit B, for the payment of any royalties on any solder manufactured or sold by defendant containing tin, and it is denied that there is no provision in the license agreement, Exhibit B, for the payment of any royalties on any solder manufactured or sold by defendant containing silver, and it is denied that there is no provision in the license agreement, Exhibit B, for the payment of any royalties on any other solder manufactured or sold by defendant embodying the inventions in plaintiff's patent No. 1,651,709. It is averred that the terms of said license agreement require defendant [fol. 34] to pay royalty on the solders it has manufactured and sold coming within the terms of the claims of patent No. 1,651,709, whether or not they contain tin or silver, although it is admitted that neither the specification in or claims of said patent make specific reference to tin or silver.

10. In reply to the averments of paragraph Fifth under the heading "Set-Off and Counterclaim" it is denied that the defendant's solder comprising copper, phosphorus and tin does not come within the scope of patent No. 1,651,709; and it is denied that said solder does not come within the scope of the claims thereof, and it is denied that said solder does not come within the terms of said license agreement, Exhibit B. It is averred that the brazing solder comprising copper, phosphorus and tin manufactured by the defendant does come within the scope of patent No. 1,651,709 and does come within the scope of certain claims thereof, and does come within the terms of said license agreement, Exhibit B. It is denied that the royalties heretofore paid by defendant to the plaintiff for copper, phosphorus and tin in the sum of $6,029.64 were therefore paid by inadvertence, and it is denied that said royalties were paid by accident, and it is denied that said royalties were paid by mistake, and it is denied that any portion of said royalties were paid by inadvertence, and it is denied that any portion of said royalties were paid by accident, and it is denied that any portion of said royalties were paid by mistake; on the con- [fol. 35] trary, plaintiff avers that defendant's averments in this connection are immaterial and that the full amount of said royalties, viz., $6,029.64, was paid by defendant to plaintiff pursuant to and in accordance with the terms of said license agreement.

11. In reply to the averments of paragraph Sixth under the heading "Set-Off and Counterclaim" it is admitted that defendant has the right to continue to make, use and sell brazing solder comprising copper, phosphorus and tin, and that defendant has the right to continue to make, use and sell brazing solder comprising copper, phosphorus and silver without interference, let or hindrance by the plaintiff, provided, however, that defendant must pay the royalty called for by the said existing license agreement covering such materials and must account to plaintiff as provided therein. It is denied that if the said patent No. 1,651,709 is construed to cover brazing solders containing tin and silver as made and sold by defendant it is invalid and void for the reasons, or any thereof, stated in paragraph Sixth of defendant's Set-Off and Counterclaim, or for any other reason, and it is denied that the alleged invention purported to be patented by patent No. 1,651,709 does not constitute patentable knowledge or information within the meaning of the patent laws of the United States, for the reasons, or any thereof, stated in paragraph Sixth of said Set-Off and Counterclaim, or for any other reason. On the contrary, it is averred that said Letters Patent No. 1,651,709 is properly construed to cover brazing solders containing tin and silver as made and sold by defendant and is valid and in full [fol. 36] force and effect and that the invention purported to be patented by Letters Patent No. 1,651,709 does constitute patentable knowledge or information within the meaning of the patent laws of the United States. It is further averred that defendant is estopped to deny or raise the issue of the validity of patent No. 1,651,709 because he holds and enjoys a license thereunder.

12. In reply to the averments of paragraph Seventh under the heading "Set-Off and Counterclaim" it is denied that while the application for said letters patent No. 1,651,709 was pending in the Patent Office the applicant so limited and confined the claims of such application under the requirements of the Commissioner of Patents that the plaintiff cannot now seek for or obtain construction of said claims sufficient to cover defendant's brazing solder comprising copper, phosphorus and silver, and it is denied that at any other time the applicant so limited and confined the claims of such application. It is averred that at all times, while said application was pending or otherwise, the conduct of

the applicant was and has been such as to create no such estoppel against plaintiff as claimed by defendant in paragraph Seventh of the Set-Off and Counterclaim.

13. In reply to the averments of paragraph Eighth under the heading "Set-Off and Counterclaim" it is admitted that on or about July 11, 1940, plaintiff notified defendant that defendant was obligated under paragraph 5 of the license agreement, Exhibit B, to observe and follow the user [fol. 37] price and distributor price lists established by the pliantiff as shown by the copies attached to the Set-Off and Counterclaim and marked Exhibits E, F and G, respectively. It is denied that because of the price fixing provisions of said agreement, Exhibit B, it is illegal and void and it is denied that because of such provisions it is a violation of the anti-trust laws, and it is denied that because of such provisions it is a violation of the Sherman Act, and it is denied that because of such provisions it is a violation of the Clayton Act, and it is denied that because of such provisions it constitutes illegal use of plaintiff's patent monopoly; it is further averred that such allegations of defendant are immaterial to the issues of this case because under such issues defendant is estopped to deny validity of plaintiff's patent.

14. In reply to the averments of paragraph Ninth under the heading "Set-Off and Counterclaim" it is denied that defendant has had any illegal restraint imposed upon it, as set forth in paragraph Eighth of the Set-Off and Counterclaim, and it is denied that defendant has suffered irreparable damage or any damage whatsoever because of any acts of the plaintiff, and it is denied that defendant is entitled to any recovery from the plaintiff on any cause of action set out in the said Set-Off and Counterclaim.

Wherefore the plaintiff denies that it is indebted to the defendant in any sum whatsoever for or by reason of any [fol. 38] matters set forth in the Set-Off and Counterclaim, and prays that said Set-Off and Counterclaim may be dismissed.

John B. Seastone.

Sworn and subscribed before me the day and year aforesaid. Edwin O. Johns, Notary Public. My commission expires March 7, 1945. (Seal.)

ORDER

And now, this 12th day of March, 1943, on motion of counsel for the plaintiff, the foregoing reply is ordered to be filed.

By the Court, O'T.

IN COURT OF COMMON PLEAS

Statement of Evidence—Filed April 26, 1943

Pittsburgh, Pa.,
Wednesday, March 24, 1943.

CORAM: Hon. Sarah M. Soffel, J.

APPEARANCES:

Jo Baily Brown, Esq., and William Booth, Esq., for Plaintiff.
William B. Jaspert, Esq., for Defendant.

[fol. 39] OFFERS: EVIDENCE

Mr. Brown: If the Court please, I would like to offer in evidence certain admissions contained in the pleadings. In the statement of claim, paragraphs 1 and 2 are admitted by defendant's answer, and those paragraphs read as follows:

First. "Plaintiff, Westinghouse Electric and Manufacturing Company, is a Corporation organized and existing under the laws of the Commonwealth of Pennsylvania, having its principal place of business at East Pittsburgh, Pennsylvania, and is engaged in manufacturing and selling brazing solder and other goods in this Commonwealth, and elsewhere."

Second. "Defendant, Alpine MacGregor, is an individual, a resident of the County of Allegheny and Commonwealth of Pennsylvania, residing at 272 Cascade Road, Borough of Forrest Hills, County of Allegheny, Commonwealth of Pennsylvania, and was on March 31st, 1937, prior thereto, and continuously since then has been engaged in the manufacture and sale of brazing solder in this Commonwealth and elsewhere."

The averments of paragraph 5 of the Bill, which are admitted by defendant's answer, reading as follows:

> "On or about March 31st, 1937, plaintiff filed suit in the United States District Court for the Western District of Pennsylvania, against the said defendant, [fol. 40] Alpine R. MacGregor, et al., alleging infringement of the said Patent No. 1,651,709 by the said MacGregor."

From paragraph 7 of defendant's answer I would like to read the following sentence as an admission:

> "Defendant admits it entered into a license agreement with plaintiff under date of November 16th, 1937, granting defendant a non-exclusive license during the term of plaintiff's patent to make, use and sell brazing solder embodying the inventions covered by said patent No. 1,651,709 and admits that defendant agreed to pay plaintiff a royalty of ten percent of defendant's net selling price of brazing solder embodying the inventions covered by said patent."

Paragraph 8 of the Bill is admitted and reads as follows:

> "A true copy of the said license agreement of November 16th, 1937, is attached hereto and made a part hereof, as Exhibit B", and from paragraph 9 of the answer, the following sentence as an admission: "In answer thereto, defendant admits that he marked the brazing solder made by him with the number of plaintiff's patent (No. 1,651,709)."

From paragraph 10 of the answer, the following admission, being the last sentence of the paragraph:

> "Defendant denies that he was required to account to the plaintiff for his sales of solder containing cop- [fol. 41] per, phosphorus and tin, and denies that he was required to permit the plaintiff to examine his books with reference to his manufacture and or sale of solder containing copper, phosphorus and tin."

From paragraph 11 of the answer the following as an admission:

> "Defendant admits that plaintiff's representatives requested the defendant to account to plaintiff and to

pay a royalty on the copper, phosphorus and silver solder manufactured and sold by defendant, which defendant refused to do because defendant is advised by counsel and therefore avers that the said solder does not come within the scope of and is not covered by any claims of plaintiff's patent, number 1,651,709, under which defendant is licensed, and does therefore not come within the terms of the license agreement, Exhibit B."

In the twelfth paragraph of the answer, the allegations of paragraph 12 of the Statement of Claim are admitted, as follows:

"Thereafter, on or about April 1st, 1941, defendant through its attorney, notified the plaintiff that defendant would not pay accrued royalties or future royalties upon brazing solder comprising copper, phosphorus and tin and upon brazing solder comprising copper, phosphorus and silver, but would continue to pay royalties on brazing solder comprising only copper and phosphorus."

[fol. 42] From paragraph 13 of the answer, as an admission the last sentence, as follows:

"Defendant denies that plaintiff, under the license agreement, is authorized to examine defendant's records as to the manufacture and sale of brazing solders comprising copper, phosphorus and tin and or copper, phosphorus and silver."

Paragraph 16 of defendant's answer as an admission:

"Further answering paragraphs ninth and eleventh specifically, and the remaining averments with reference to defendant's manufacture of solder containing copper, phosphorus and tin, and copper, phosphorus and silver, defendant avers that the copper, phosphorus and tin manufactured by him is covered by defendant's patent number 2,125,680 granted to him on the second day of August, 1938, and the solder manufactured by defendant containing copper, phosphorus and silver is covered by defendant's patent number 2,162,627 granted to him on the 13th day of June, 1939."

From defendant's counter claim certain statements and allegations, which have been admitted in plaintiff's reply to that counter claim, as follows:

Paragraph 2 of the counter claim:

> "The patent office has granted defendant United States letters patent number 2,125,680 describing and [fol. 43] claiming the solder containing copper, phosphorus and tin manufactured by defendant and charged by plaintiff to come within the scope of certain claims of patent number 1,651,709 and within the terms of said license agreement, Exhibit B. Copy of said patent number 2,215,680 is hereto attached and marked Exhibit C."

From paragraph 3 of defendant's counter claim the following allegation, which is admitted in the answer thereto:

> "The Patent Office granted to defendant, patent number 2,162,627 describing and claiming the solder comprising copper, phosphorus and silver manufactured by defendant and charged by plaintiff to come within the scope of certain claims of patent number 1,651,709 and within the terms of the license agreement, Exhibit B. Copy of said patent number 2,162,627 is hereto attached and marked Exhibit D."

I would like to read into the record an admission from paragraph 10 of defendant's answer as follows:

> "For answer defendant avers that the royalties paid by him to the plaintiff on the said solder comprising copper, phosphorus and tin were at the rate specified in said license agreement."

I should like to offer in evidence plaintiff's Exhibit 1, a copy of United States Patent No. 1,651,709, issued to Jesse L. Jones, as assignor, to the Westinghouse Electric and [fol. 44] Manufacturing Company, the plaintiff herein. This is an uncertified copy, but by agreement of counsel all uncertified copies of that kind might be received, and these were marked at Pre-trial as plaintiff's Exhibit 2, and I offer a printed copy of license contract dated the 16th day of November, 1937, between the Westinghouse Electric and Manufacturing Company and Alpine MacGregor,

which is the contract under which this particular suit is brought. A printed copy has been accepted by counsel for defendant as authentic, and proof of signatures and execution waived.

I should like to offer in evidence as plaintiff's Exhibit, a copy of MacGregor patent number 2,125,680. This patent was marked at Pre-trial as defendant's Exhibit M and may be so designated in the further proceeding in this case.

I should like to offer as plaintiff's Exhibit a copy of patent number 2,162,627, the patent having been issued to MacGregor, the defendant in this case, the patent marked defendant's Exhibit N at Pre-trial.

These two patents are offered as containing the admitted description of the modified solders that have been made and sold by MacGregor and upon which he now refuses to account and to pay royalties. In other words, he pleads that his solders that are in controversy are made in accordance with the description of these patents, and they are offered in connection with admission from the pleading that has been read into the record.

[fol. 45] WALTER A. GRAHAM, a witness called by plaintiff, being duly sworn, testified as follows:

Direct examination.

Mr. Brown:

Q. Mr. Graham, please state your full name, residence and occupation.

A. Walter A. Graham, 419 South Braddock Avenue, Pittsburgh. I am an employee as a nonferrous metallurgist, of the Westinghouse Electric and Manufacturing Company, East Pittsburgh Works.

Q. How long have you been with that company?

A. Since May, 1936.

Q. In what capacity have you worked for the Westinghouse Company since 1936?

A. As a non-ferrous metallurgist.

Q. In your profession or employment as a non-ferrous metallurgist for the Westinghouse Company have you had occasion to be familiar with the making, using and characteristics of solders for uniting non-ferrous metals?

A. Yes.

Q. That is your duty?

A. It is part of my duties.

Q. Are you familiar with the so-called phos-copper solder which is described by the Jones Patent that you have heard referred to this morning?

A. Yes, sir.

Q. Are you familiar with the MacGregor phos-copper [fol. 46] and tin solder, as that product is found on the commercial market?

A. Yes, sir.

Q. Are you familiar with the MacGregor phosphorus copper silver solder as that solder is found on the commercial market?

A. Yes.

Q. Have you ever had occasion to use or see used for practical soldering operations, the three solders, namely, the Westinghouse phos-copper and the MacGregor phos-copper tin and the MacGregor phos-copper silver solders?

A. Yes.

Q. Will you tell us what differences there are in operating results in soldering with the Westinghouse phos-copper solder as compared with the MacGregor phos-copper tin solder?

A. In our experience we have not been able to find any noticeable difference of the three, the Jones and the two MacGregor solders.

Q. Has it been your observation, or what has been your observation as to whether or not the Westinghouse phos-copper solder and the MacGregor phos-copper tin solder are useful for the same purpose, or interchangeable in use for the same purpose?

A. They are interchangeable for use in the same purpose and application.

Q. What has been your observation as to whether or not the addition of tin to the phos-copper solder by MacGregor [fol. 47] has changed the characteristics of the phos-copper solder without tin?

A. There is no observable difference in the practical application.

Q. If I understand you then, these two solders could be interchanged for the ordinary use for which each is designed?

A. That's right.

Q. Will you make the same comparison as to the use of the Westinghouse phos-copper solder and the MacGregor phos-copper plus silver solder?

A. Yes.

Q. Will you make it, please? What difference, if any, do you find in using them?

A. There is no observable difference in the practical application between the phos-copper silver and the phos-copper as in the Jones Patent.

Q. Is it fair to say that in your experience the Westinghouse phos-copper silver could be used where the MacGregor phos-copper silver solder is used, and vice-versa?

A. Yes, sir.

Q. With substantially the same results?

A. The same results.

Q. Mr. Graham, is this testimony you have given, comparing the three solders about which you have been interrogated, based upon your own observation or use of these solders?

A. Yes, sir.

[fol. 48] Cross-examination.

Mr. Jaspert:

Q. Mr. Graham, I hand you a copy of the Jones Patent that you have referred to. What do you mean by the differences between the Jones alloy and the MacGregor phos-copper silver and tin alloys? You say there was no difference. By what comparison do you find there was no difference?

Mr. Brown: I object to that question as misstating the testimony given by the witness. He was not asked as to the difference. He was asked as to the results of using them in soldering.

The Court: I think that is true. There was no testimony here as to the composition of the three different solders. This witness was simply asked as to the operating results.

(Question withdrawn.)

Q. Mr. Graham, on what basis did you make a comparison in the operating results of the Jones alloy of the patent and the MacGregor alloys of the MacGregor Patents containing tin and silver?

A. The actual making of the joints.

Q. You mean that all three would solder a joint?

A. Yes, sir.

Q. Is that as far as you went?

A. In observing the manner in which the joints were made and broken with equal results.

Q. What do you mean by broken?

[fol. 49] A. In the testing of the joints.

Q. Will you please go into that a little farther. How do you test a joint and what for, after you have soldered it?

A. Test it for ductility and whether or not it is a good joint, as observing fractures.

Q. As to brittleness and ductility and physical properties generally?

A. Not necessarily physical properties, no.

Q. Would a difference in fluidity of the alloys be apparent in the joints when you break it and examine it?

A. Only insofar as if the fracture—if the joints are fully covered by the bonding material.

Q. There are a large number of non-ferrous alloys used as solders, are there not, besides the ones referred to here?

A. Yes.

Q. Some of them contain copper and phosphorus, do they not?

A. Very few.

Q. And those that do or do not, do they on the comparative basis that you are describing, also affect the joint by soldering with heat?

Mr. Brown: I object to that, if your Honor please, as outside the scope and as being directed to developing differences, if any. The witness was asked merely as to the operation or results of the three particular solders. Mr. Jaspert is now seeking to make him his own witness and [fol. 50] lead him into what may have been done by other solders not in the case at all.

Mr. Jaspert: This witness has been put on to just generally state that solders are solders. That is entirely irrelevant and immaterial to the case.

The Court: He has not done that. That is not my recollection of the testimony. This witness has testified that the Westinghouse solder and the MacGregor solder with tin in it and the MacGregor solder with silver in it, in their

operational results, are exactly the same. That is the only thing he has testified to. It is a very narrow line of examination.

Objection sustained.
Exception noted.

Mr. Jaspert:

Q. Mr. Graham, you did say that you were familiar with the Jones Patent, did you not?

A. Yes, sir.

Q. Will you state with reference to that patent what the composition of the alloy is that is described therein?

Mr. Brown: I object to that. The patent is in evidence and it is part of the evidence of what it discloses as to the composition. The witness was not asked anything about the composition of the Jones Patent.

[fol. 51] Mr. Jaspert:

Q. Mr. Graham, will you please with reference to the Jones Patent, point out what alloy that is therein described, you used in these comparative tests?

A. I used an alloy of approximately seven percent phosphorus and the balance copper.

Q. Where do you find that described in the patent?

A. The first claim of brazing solder.

Q. We are not talking about claims. We are talking about the description. I am asking you to point out which of the solders described in that patent were employed in making these comparative tests?

Mr. Brown: I object to that question. I concede that Mr. Jaspert is certainly entitled to find out what solder Mr. Graham used as being the Westinghouse phos-copper solder. The question as to whether it comes under the patent is not a question for Mr. Graham to pass on at all. He was not asked about the Jones Patent on direct examination. He has given the constituents of the solder he tested. It is immaterial for counsel to argue whether it comes under the Jones Patent and have Mr. Graham interpret the patent at this stage.

The Court: I thought the Jones Patent and the Westinghouse Patent were one and the same.

[fol. 52] Mr. Brown: It is, your Honor.

The Court: Now Mr. Jaspert has asked this witness what his solder was composed of that he used for testing purposes and he answered that question. Then the next question that followed was whether that solder conformed with the elements of the patent.

Mr. Brown: That is my objection.

The Court: I can't see why you object to that because I thought it was self-evident to me that it was.

Mr. Brown: I simply wish to protect myself in this way: This witness was not put on to interpret the Jones Patent at all or to tell you what its claims mean, or what its description includes or excludes. That is a matter for argument to the Court on a written document. Mr. Jaspert is trying to get him to say what he did. In other words, he is trying to get him to interpret the patent. I object to that.

Mr. Jaspert: I believe if the reporter will check back to Mr. Brown's original question to Mr. Graham.

(Testimony referred to.)

The Court: If you will permit him to answer that question yes or no, I think that is all right.

[fol. 53] Objection overruled.

Exception noted.

The Court: Answer the question yes or no.

Mr. Jaspert:

Q. Is the seven percent solder that you used for making the test, described in the patent specifications? Answer yes or no.

A. Yes.

Q. Will you please point out where?

A. In line 99, "Various percentages of phosphorus in the alloy may be utilized but preferably I restrict myself to an alloy containing ten percent or less phosphorus."

Q. That does not say seven percent, does it?

A. Not specifically.

Q. What would be the difference between a solder having ten percent phosphorus and one having seven percent, so far as these tests that you made, are concerned?

Mr. Brown: Objected to as a purely hypothetical question.

Objection sustained.

Exception noted.

Mr. Jaspert: This man has qualified as a metallurgist working on these non-ferrous alloys, and the very purpose of his testimony is to establish him as an authority capable—

The Court: In a very narrow field. One question and [fol. 54] one only, "Did you compare, so far as operational effect is concerned, the Westinghouse solder with the other two solders?" That is all he answered. Now he has answered and stated what his solder was composed of. Then you asked him where he gets his authority for making up his solder in the patent and he has referred to the particular section.

(Question withdrawn.)

Q. How did you know you were using the MacGregor alloy when you made these tests?

A. I purchased it from the MacGregor Company.

Q. How do you know whether it was silver or tin?

A. I don't know.

Q. In other words, they may have been both tin, one or the other? You may have tested both samples as tin and now you are stating you tested tin and silver, or they may have been both silver, and you are testifying you compared tin with silver?

A. They were not purchased as such, and they came out of the same package as received for a particular solder that we purchased.

Q. And you don't know whether they were either tin or silver or both alike?

A. That is correct.

Q. You don't know whether they even contained tin or silver?

A. Not the particular rods we used, no.

Q. Did you ever make any other kind of tests of these [fol. 55] MacGregor solders, that you did know the composition of the material?

A. We analyzed the other rod of the same packages.

Q. How did you analyze them?

A. Chemical analysis.

Q. Can you state what that chemical analysis was?

A. In approximate terms. The one showed tin and the other showed silver, the presence of silver and tin, in addition to phosphorus and copper.

Q. Did the tin alloy have two percent phosphorus or eight percent phosphorus?

A. As I remember, it was very close to seven percent.

Q. Do you know the exact figures?

A. I have them on some paper I have with me.

Q. What was the percentage of silver?

A. Somewhere between 1.6 and 1.7 silver.

Q. Have you tested any MacGregor alloys containing two percent phosphorus?

A. No.

Q. Would you say if you did, from your general knowledge, that the results would be the same?

Mr. Brown: I object to that.

Objection sustained.

Exception noted.

Q. Then you can't say that you ever made a test comparing the alloys of the MacGregor patent number 2,125,680, as described therein, with the alloy of the Jones Patent, as [fol. 56] described in the Jones Patent, can you?

A. Only insofar as we purchased a particular alloy from Mr. MacGregor.

Mr. Brown:

Q. I think I asked you on direct examination if the MacGregor solders you tested were solders purchased on the market as being the commercial product put out by the MacGregor Company?

A. That's right.

Q. Will you state whether or not the MacGregor solder which you took to be his tin variety, was MacGregor number 1300?

A. Yes, sir.

Q. Is that his trade name for that solder?

Q. Yes, sir.

Q. That is widely distributed by MacGregor under that trade name, to your knowledge?

A. To my knowledge.

Q. State whether or not the solder of MacGregor which you tested and assumed was his silver alloy solder, was also purchased on the open market as the commercial product that MacGregor put out?

A. Yes, sir.

Q. And was that solder identified as number 1270?

A. Yes, sir.

Q. Is that to you- knowledge a well-known trade name of the MacGregor silver solder?

A. Yes, sir.

Q. I believe you stated on cross examination that al- [fol. 57] though you did not test the specific pieces that you used for welds, that a chemical analysis was made of other parts of those shipments?

A. Yes, sir.

Q. And you gave the results of that to Mr. Jaspert on cross examination?

A. Yes, sir.

(Recess.)

WALTER A. GRAHAM resumes the stand and testifies further as follows:

Mr. Brown:

Q. Mr. Graham, the phos-copper solder of the Westinghouse Company that you used in making these comparative tests, what do you know as to its constituents?

A. The actual rod that I used in making the test was not analyzed but it was of our commercial material that we make.

Q. And what, if any, steps do you take to secure uniformity of product of that commercial material as to the constituents used in it?

A. We have our own specifications to which we make the material and we analyze every heat of metal made, by a chemical analysis.

Q. So that all of the phos-copper solder that is put out by Westinghouse Company has been analyzed for constituents?

A. That is correct.

Q. What approximately are the constituents of this phos- [fol. 58] copper as commercially put out by Westinghouse and as tested by you?

A. Approximately seven percent phosphorus and ninety-three percent copper.

Mr. Jaspert:

Q. You stated that in the tests you did not find any observable difference. You would not say that there were not any actual differences?

A. There was no observable difference.

Q. Now that is a matter of opinion, isn't it, among different welders, as to their joints?

A. I should say so, it would be a matter of opinion.

Plaintiff rests.

MOTION FOR DISMISSAL AND ORDER REFUSING SAME

Mr. Jaspert: Counsel for defendant moves for dismissal of the bill, on the ground that the infringement has not been proven by the plaintiff.

Motion for dismissal is refused.

Exception noted to defendant.

JOHN B. SEASTONE, a witness called by defendant, being duly sworn, testified as follows:

Direct examination.

Mr. Jaspert:

Q. Mr. Seastone, I hand you a letter marked defendant's Exhibit L and ask you if that is your signature?

A. Yes, sir.

Q. That letter is dated July 11th, 1940, and addressed to [fol. 59] the defendant, A. R. MacGregor. I now refer to some price schedules attached to the letter.

Mr. Brown: I would like to have an offer as to the purpose of this evidence.

Mr. Jaspert: We offer to prove and establish that the price schedules submitted to MacGregor by the letter of July 11th, 1940, were submitted in conformity with paragraph 5 of the license agreement between the Westinghouse Company and MacGregor, and paragraph 6 of the license agreement between Westinghouse and MacGregor.

Mr. Brown: Our objection is that such evidence is immaterial to any issue in this case.

Mr. Jaspert: I further feel that the testimony is material because I intend to show that the license is illegal, for the reason that it attempts to control the price of unpatented articles and for the further reason that it attempts to control the resale price of articles if the patent is valid and if they do come under the patent.

Mr. Brown: We object to any evidence to that effect as being irrelevant and immaterial to the issues in the case. Further, quite inconsistent with the defendant's position as taken in the pleadings, where defendant admits it is still [fol. 60] operating under this license and enjoying the benefits of the license.

Mr. Jaspert: The defendant's answer specifically denies the validity of the license agreement because of its illegality. So it has been set forth in the pleadings.

The Court: The Court will overrule the objection to this particular testimony at this stage of the record, reserving however a final decision at the conclusion of the case as to the admissibility or nonadmissibility of the entire testimony of this particular nature. It will be understood that exceptions will be noted to plaintiff to cover all testimony relating to the offer.

Mr. Booth: We will make the exception to this evidence at this time, your Honor.

The Court: The Court's position is not final. The final decision must be rendered, and you need not repeat your objections at all times.

Mr. Jaspert:

Q. These price schedules, Mr. Seastone, in your letter, were they submitted in pursuance to the license agreement between Westinghouse and MacGregor?

A. I believe so.

Q. Are you familiar with that agreement?

A. I have read it but I do not recall it now.

[fol. 61] Q. Do you know that it contains a price fixing clause as follows. Paragraph 5: "Westinghouse grants this license on the express condition that the prices, terms and conditions of sale for use or sale in the United States of America, its territories and possessions of brazing solders embodying the invention covered by said Letters Patent and so long as such brazing solders continue to be covered by said patent, shall be no more favorable to the

customer than those which from time to time Westinghouse establishes and maintains for its own sales of similar or competing brazing solders under such patent to such or other similarly situated customer purchasing in like quantities. MacGregor shall be notified of all such prices, terms and conditions of sale fixed by Westinghouse. The prices, terms and conditions of sale of Westinghouse may be changed by Westinghouse from time to time, notice being given MacGregor, but not less than five days' notice shall be given before any such change shall go into effect." Now, your letter and schedules were sent MacGregor in pursuance to that provision of the license. Is that right?

A. I believe so.

Q. Will you refer to the schedules and identify them, please. The heading is at the top.

A. Those are our price schedules, I believe, or were at one time.

Q. And you find at the top of one numbered page 23, "User Price List 26-820". Is that correct?

A. Yes.

[fol. 62] Q. And on that schedule marked page 26, it is headed "Distributor Price List"?

A. Yes.

Q. Numbered 26-826?

A. Yes.

Q. With reference to the bottom of the second page of that distributor price schedule, do you find any reference at all to a user price?

A. You are referring to the second part of this sheet?

Q. Of the distributor price schedule.

A. I see the statement "Prices to the User are determined by the aggregate weights on individual orders, authorized for unit shipment to one destination".

Q. What does that mean in this distributor price schedule?

A. Nothing, I should say.

Q. You just put it in there for fun?

A. I would say this is the distributor's price list and not the user's price list.

Q. But it establishes the user prices, does it not?

A. I think not. I think it practically establishes the price of the sale to the distributors.

Q. And the part that you just read from, under the caption "Assortments, Prices to the User are determined by

the aggregate weights of individual orders, authorized for unit shipment to one destination", is also in your distributor price list, isn't it?

[fol. 63] A. Yes.

Q. And is that not the form of the instruction to the distributor as to the price at which he sells to the user at re-sale?

A. I think not. I think it is simply a restatement of the same statement made on the user price list. In other words, it simply determines the fact that prices are based on certain quantities of shipment and so forth.

Q. Why is it put in the distributor price list?

A. I presume because when the distributor buys, he is subject to the same restrictions. That is, if the distributor buys in a certain quantity bracket, he is subject to that same restriction.

Q. Isn't that already taken care of in the schedule above in your distributor price list? Doesn't that give you exactly the prices for the quantities and the sizes?

A. I am not sure I get your question exactly.

Q. You stated that the distributors were governed by the user price or the re-sale price, and at the top of the distributor price list you have given the distributor prices, the prices they have to pay for given quantities. Is that correct? Let me ask you: why do you have a separate user price list?

The Court: Wait a minute. You have several questions there.

A. I am a little confused. I believe that—I am not sure of this, but I believe that if the distributor buys in small [fol. 64] quantity brackets, that he obtains the price that comes along with that bracket, less the discount shown, and this is simply more or less a form paragraph indicating that he gets that price, less the discount. That is my impression.

Q. Are you responsible for putting out these price schedules?

A. Yes.

Q. You would really know what they should mean?

A. I should know.

Q. Is it your duty to enforce these among your licensees?

A. No. Perhaps I should not answer that because I don't know exactly what you mean.

Q. If you know of any violation of these prices, what do you do about it?

A. Again, what do you mean specifically?

Q. You put these price schedules out for a purpose, do you not? You expect the distributors and users to conform to these prices. Let me ask you, why did you submit these schedules?

The Court: Wait a minute. You ask him a question and before he can answer it, you ask him another one.

(Question withdrawn.)

Q. Mr. Seastone, when you submitted these schedules of the user and distributor prices to Mr. MacGregor, what did you require of him by way of conforming with the prices and discounts set forth in those schedules?

A. I think we required that when he sold to a distributor, [fol. 65] he would sell on the terms set forth; that when he sold to a user as opposed to a distributor, that he likewise conform to the schedule set forth in the user form.

Q. Was MacGregor to furnish the distributors and users with these schedules?

A. I don't know.

Q. If, after you submitted these to Mr. MacGregor, you found that there was some deviation from the prices, would you do anything about it?

A. No.

Q. You never complained to Mr. MacGregor that he did not keep up his prices?

A. I think there were cases—there may have been—perhaps I should better get the question specifically in mind before I answer.

(Question read.)

A. I think on one occasion, if I remember, we did discuss with MacGregor as to whether or not he was maintaining his prices.

Q. Was it with reference to any particular customer of MacGregor's?

A. I don't remember.

Q. Was the complaint about the prices he was charging the distributor or the prices that the distributor was selling for?

A. I would believe, without remembering, I believe that it was the prices that he was charging the distributor be-

cause, and I believe that because we had specific discussions both with MacGregor and I believe with you at that time, to the effect that that was the limit that we might not exceed, that we were only properly interested in MacGregor's [fol. 66] prices to his distributors or MacGregor's prices to the users who purchased from him.

Q. Did you not complain about a New England distributor selling at less than the list price, in my office?

A. I don't remember.

Mr. Brown: It seems to me that the examination is degenerating into cross examination of his own witness, and directly immaterial. The witness said he put out these price lists that MacGregor was required to meet, and what difference does it make as to whether we go into specific instances or not? Objected to as immaterial, in addition to our covering objection. In other words, it is material from the defendant's own theory.

The Court: I think that objection is well taken.

Objection sustained.

Exception noted.

Noon Recess.

[fol. 67] Afternoon Session.

Mr. Booth: Objection was made before, which was overruled provisionally in regard to this testimony by Mr. Seastone. I would like to enlarge upon our objection at this time. We object generally to this offer of testimony on his part, which was to prove that the agreement was illegal because we think the testimony is generally irrelevant and immaterial, and specifically, it is irrelevant and immaterial because it does not prove or tend to show illegality and specifically it is immaterial and irrelevant because if it does establish illegality, the illegality is immaterial in this issue because it is a divisible and separable matter.

Objection overruled.

Exception noted.

JOHN B. SEASTONE resumes the stand and testifies further as follows:

Mr. Jaspert:

Q. Does Westinghouse have other licensees under the Jones Patent?

A. We have, I believe—I believe it is correct to say there are two.

Q. One of those is the United States Government, the Navy Department?

A. I believe so.

Q. And it does not manufacture this alloy. Is that right?

[fol. 68] A. As far as I know.

Q. And the other is—would you name the other for us?

A. I believe that the other one is the Charles Hardy Company. That is the approximate name.

Q. Do they sell this same alloy in the rod form?

A. I believe not.

Q. Then the price lists as Westinghouse has prepared them, are primarily for the use of Westinghouse and MacGregor. Is that correct?

A. Yes.

Q. And does Westinghouse furnish both user price list and distributor price list to their distributors?

Mr. Brown: I don't see the materiality of that as to what Westinghouse does with other distributors. We object to it.

Objection sustained.

Exception noted.

Mr. Jaspert: I will try to establish the use that is made of these price lists.

Mr. Jaspert:

Q. Why did you give these price lists to Mr. MacGregor?

A. I believe that because it is necessary under our agreement with him, that we notify him of our prices in order that he may follow them.

[fol. 69] Q. The letter, defendant's Exhibit L, of July 11th, 1940, refers to a conference had between yourself and MacGregor prior to the issuance of this list. What was the nature of that conference?

A. I believe that that was a discussion held in our patent department after an audit of MacGregor's books at that time and the purpose was to clear up, I believe, a matter of non-payment as of that time.

Mr. Brown: Mr. Jaspert, will you show us in the letter where there is reference to a conference so that the witness will not be giving an answer under a misapprehension?

Mr. Jaspert: "Confirming our conversation with you today". That is the conference.

Mr. Jaspert:

Q. Proceed, Mr. Seastone.

A. And establish the basis for future operations.

Q. Did you at that time discuss these new price lists, the distributor and user price lists?

A. We may have.

Q. Do you know that you did?

A. I have the impression that I did but I don't recall specifically what was said.

Q. Did you instruct Mr. MacGregor as to the use that he was to make of these price lists?

A. I believe so.

[fol. 70] Q. And what were your instructions?

A. I am quite confident that at that time our instructions were specific to the effect that these were the prices that he was governed by in his sales, and I believe that we were also specific in pointing out to him at that time that we could not attempt to control his re-sale, that is, re-sale prices of his customers.

Q. Why was that question raised?

A. I have the—I don't know exactly why it was raised. I will put it that way.

Mr. Brown:

Q. Mr. Seastone, this letter, defendant's Exhibit L, and the attached price lists sent out by you on July 11th, 1940, are the prices that the Westinghouse Company sold its phos-copper solder, as made under the Jones Patent?

A. That's right.

Q. In other words, those are your price lists put out to your salesmen and distributors to control their sale of your product?

A. Yes, sir.

Q. And the two lists, one to distributors and one to users, refer specifically to two sets of customers, as I understand?

A. That is correct.

Q. In other words, you sell your copper to distributors, who may then re-sell it, break it up and sell it to users or anybody else they choose?

A. Yes.

Q. And your control of prices was in that case only the sales to to the distributor?

[fol. 71] A. Yes.

Mr. Jaspert: I don't mind Mr. Brown testifying but——

Mr. Brown: This is cross examination.

Mr. Jaspert: Even so, I think the witness should testify to what these things were for.

The Court: I think he is entitled to do what he is doing at the present time. Go ahead.

Mr. Brown:

Q. Now, what was the class of customers referred to as users of your material, as distinguished from distributors?

A. Persons that were users principally.

The Court:

Q. You mean individuals?

A. Either individuals or corporations.

Mr. Brown:

Q. As, for example, a company like General Motors, and so forth, that might buy this solder direct to be used in its own plant, in very substantial quantities, that would be a user customer?

A. Yes.

Q. Whereas if you sold to someone like Kaufmanns, to use a fictitious name, who were simply going to retail this out, that would be a distributor?

A. That would be a distributor.

Q. Regardless of what is said in Exhibit L and the price list contained with it, the question arose at the time that [fol. 72] these price lists were sent to MacGregor as to

whether or not they were intended to control re-sale prices, as I understand your testimony?

A. That is correct.

Q. Now, please tell us again so that there may be no question about what you have said, whether or not there was direct conversation with MacGregor at that time as to his obligation to maintain or fix re-sale prices of his licensed product?

A. It is my recollection that there was a direct discussion with Mr. MacGregor at that time to that specific effect, and that there was another discussion very shortly afterward with Mr. MacGregor and Mr. Jaspert to the same effect, and I believe that that was later confirmed by a letter.

Q. And was the understanding that you conveyed to them, as you recall it, that there was no attempt or desire on the part of Westinghouse to control re-sale prices of the licensed product?

A. There was that agreement?

Q. I show you a letter which has been marked plaintiff's Exhibit No. 3 at Pre-trial, written by Mr. Jaspert to the Westinghouse Electric and Manufacturing Company, and ask if you saw that original of that letter at or about the time of its date?

A. I either saw the letter or was made acquainted with its contents because I remember the subject matter.

Q. I show you a printed copy of the letter which has been marked Exhibit 4, dated October 23rd, 1940, from Mr. Savage of the Westinghouse patent department, to Mr. [fol. 73] Jaspert. Were you familiar with that letter at or about its date, or the copy of it?

A. I was familiar with that letter and with its contents about that date.

Q. Now, this letter of Mr. Savage contains the following paragraph which I shall read.

Mr. Jaspert: I object to that unless you also read into the record the italicized paragraph of my letter.

Objection overruled.

Exception noted.

Q. "I understand that Mr. MacGregor and our Mr. Seastone had a long discussion of our price schedules, and that they are now in agreement on just what these price schedules mean. Therefore, there need be no further mis-

understandings on the part of MacGregor as to what is involved under the terms of the license agreement." Mr. Seastone, are you that one that is referred to in that letter?

A. I believe so.

Q. Now, was it or was it not the understanding that you and Mr. MacGregor arrived at, that the price schedules had nothing to do with control of re-sale prices?

A. That is my recollection.

Q. Is that what was agreed to at the conference referred to in this paragraph?

A. That is my recollection.

Mr. Brown: I should like to read a further paragraph from that letter. This is a letter from the patent attorney of the Westinghouse Company to the attorney for Mr. [fol. 74] MacGregor. The last paragraph, reading as follows: "I do not believe there is any basis for contending that we have endeavored to establish a user price per pound in addition to the original sales price or dealer price. Certaintly if MacGregor sells directly to the user, he should conform to user prices established, and when he sells directly to the dealer, he should conform to the dealer prices established. I do not believe that at any time we have tried to go further than this. This has been our viewpoint long before the Ethyl Gas decision."

Mr. Brown:

Q. Does that statement by Mr. Savage express correctly the understanding that you arrived at with Mr. MacGregor at the conference referred to in this letter?

A. I believe that it does.

Q. Have you at any time since the date of defendant's Exhibit L, attempted to fix the re-sale prices of MacGregor's product, licensed under the contract that is involved in this suit?

A. No.

Mr. Brown: I would like to offer in evidence now as plaintiff's Exhibit 3 a letter written by William B. Jaspert, attorney for Mr. MacGregor, dated August 12th, 1940, to the Westinghouse Company, and a copy of a letter dated October 23rd, 1940, from Mr. Savage of the Westinghouse patent department, to Mr. Jaspert, the latter letter being [fol. 75] offered as plaintiff's Exhibit 4 and having been so marked at the Pretrial.

Mr. Brown:

Q. Do you know whether or not Mr. MacGregor is observing any prices established by Westinghouse in the sale of his phosphorous copper and tin, or phosphorous copper and silver solder at this time?

A. I don't know.

Q. You don't know whether he is observing these or not?

A. No, I don't.

Mr. Jaspert: I wish to offer in evidence the letter and price schedules marked defendant's Exhibit L, identified by the witness.

Mr. Brown: That comes under our general objection and our specific exception.

The Court: That is correct. I understand this whole examination is subject to that.

Mr. Jaspert:

Q. With reference to the letter, plaintiff's Exhibit 4, did you consult with Mr. Savage in the writing of that letter?

A. What letter is that?

Q. That is the one Mr. Brown quoted from.

A. I presume I must have, without being able to specifically remember.

[fol. 76] Q. That letter was a reply to the letter, plaintiff's Exhibit 3, of August 12th, 1940, was it not?

Mr. Brown: I object to that. He didn't write the letter.

Objection sustained.

Exception noted.

Mr. Jaspert:

Q. In that letter, plaintiff's Exhibit 3 appears the following statement: "The requirement that the licensee establish a user price per pound in addition to the original sales price or dealer price is illegal under the recent pronouncement of the Supreme Court in the Ethyl Gas case as an attempt to extend the patent monopoly in restraint of trade. I can not advise my client to even attempt to enforce such a price schedule as it would subject him to prosecution by the Department of Justice as a co-conspirator in violation of the Clayton Act, entailing fine and imprisonment. Per-

sonally, it is the writer's view that such a price schedule, particularly with the conditions as appear therein, is unenforceable because such conditions are in restraint of free trade."

The Court: Why is that read into the record?

Mr. Jaspert: Because Mr. Brown quotes from his letter into the record.

The Court: This is a legal conclusion of the writer, and not of necessity binding upon this Court.

[fol. 77] Mr. Jaspert: Their letter was in reply to that legal conclusion.

Mr. Brown: That is Mr. Jaspert's own letter.

The Court: The Court regards this as a self-serving declaration. It is a statement of opinion and a legal conclusion. In the Court's judgment it has no evidential value, but we will let it be read into the record. In cross-examination the other letter was read from. The question was asked, predicated on the statement that was read, which is a different situation. Now, your Exhibit is in evidence for whatever value it has, but the mere reading of paragraphs, which in its essence is a legal conclusion, does not in any way bind this Court, and has no evidential value except as it may relate to the general matter. It is simply an attorney's opinion which in no way binds the Court, regardless of whose opinion it is.

Mr. Jaspert:

Q. Was there not at the time that letter was written, some dispute about maintaining re-sale prices?

Mr. Brown: I object to that. He went into that on direct examination and that was all cleared up. He said there [fol. 78] might have been some question raised about it at the time and it was all talked out, and a clear understanding was reached.

Objection sustained.

Exception noted.

ALPINE R. MACGREGOR, the defendant, being duly sworn, testified as follows:

Direct examination:

Mr. Jaspert:

Q. Please state your name, age and residence.

A. My first name is Alpine, middle initial R, MacGregor. My present age is 48. My residence is 272 Cascade Road, Forest Hills, Pennsylvania.

Q. You are the defendant in this case?

A. So I understand.

Q. What is your present business?

A. I am engaged in the manufacture and sale of various and sundry brazing and welding alloys.

Q. When did you start in this business, Mr. MacGregor?

A. I think it was in June, 1936.

Q. What products did you manufacture at that time?

A. At that time I manufactured the alloy which I refer to as the copper phosphorus tin alloy.

Q. Is that the alloy that is covered by your patent number 2,125,680?

A. That's right.

Q. At the time that the plaintiff sued for patent infringement, what alloys were you then making?

[fol. 79] A. I was then making that same alloy only.

Q. You say only?

A. Only.

Q. Had you made any other alloy from the time you started to manufacture until the time of the patent infringement suit?

A. The patent infringement suit——

Q. In November, 1937.

A. That was still just the copper phosphorus tin alloy.

Q. Then it is not true, as stated in the complaint here, that you were also manufacturing the copper phosphorous alloy of the Jones patent?

A. I made the straight copper phosphorous alloy described in the Jones Patent, after taking the license.

Q. Do you make any products other than the copper phosphorous tin alloy today?

A. Oh yes.

Q. And also you manufacture the copper phosphorous silver alloy, your patent number 2,162,627?

A. That's right. I manufacture that and others.

Q. Why did you take a license under the Jones Patent?

A. I don't mean this shall necessarily be a complete answer to that question. At the time——

Mr. Brown: Mr. MacGregor, if the Court permits me, I think you should make a complete answer to that question. You are supposed to tell the truth and the whole truth.

[fol. 80] A. I don't intend to evade any truth, Mr. Brown. Just depending on memory, to a large extent, I may forget some items. I was served notice of an infringement. I took that to Mr. Jaspert. What transpired between Mr. Jaspert and counsel for the Westinghouse, I have little knowledge of. The next development in that process was that I was offered a license.

Mr. Jaspert:

Q. What was your reason for taking it at the time?

A. I don't know that I understand the question too clearly, the reason for taking the license.

Q. You did state that you did develop this copper phosphorous tin alloy and was manufacturing it before this suit came up. Is that correct?

A. That is correct.

Q. When you began the manufacture of that copper phosphorous tin alloy had you any knowledge of the Jones Patent?

A. I knew it existed, yes.

Q. And did you, when you began the manufacture of the copper phosphorous tin alloy, assume that you were infringing the Jones Patent?

Mr. Brown: I don't think it makes any difference what he answers, but it seems to me it is utterly immaterial.

Objection sustained.
Exception noted.

Mr. Jaspert:

Q. Why did you not contest this patent infringement suit [fol. 81] that was brought in November, 1937?

Mr. Brown: Objected to.

Objection sustained.
Exception noted.

Mr. Jaspert: There are peculiar angles to this case.

The Court: This Court is not trying the infringement suit. This Court has a very narrow issue here. Therefore, I see no reason why we should go back and get into that infringement suit.

Mr. Jaspert: Mr. Brown's opening statement this morning started with the infringement suit. I think it could be explained to your Honor.

The Court: Certainly by way of history, as laying the background for the creation of the license. That was my understanding of it. Why the license was issued to him and why he accepted it is not material. He did accept the license agreement. That is a fact. The license agreement is here. This suit is predicated on that license agreement. Is that right?

Mr. Brown: That is our position exactly, your Honor.

Mr. Jaspert:

Q: Mr. MacGregor, with reference to these price schedules, defendant's Exhibit L, how were you instructed in the [fol. 82] use that you were to make of those schedules, and by whom?

Mr. Booth: We assume that this witnesses's testimony along this line is subject to our same objection to the price schedules?

The Court: Perhaps here you had better make a specific exception.

Mr. Booth. We object to any testimony along this line referring to these price schedules, for the reason this testimony is generally irrelevant and immaterial, and is specifically irrelevant and immaterial because it does not tend to show illegality and if it does tend to show illegality, the illegality is immaterial in this issue because it is divisible and separable.

The Court: This line of questioning is permitted to go into the record now, subject to final decision as to its ultimate admissibility.

Mr. Booth: And we shall take an exception to your present ruling.

Exception noted.

(Question read.)

A. Those price schedules were given or handed to me at that conference in the patent department I believe on

July 11th, 1940, handed to me by Mr. Seastone. He later confirmed it by the letter transmitting them. There was at [fol. 83] the time of the presentation of the price schedules to me some discussion between Mr. Seastone and myself as to the interpretation of what they meant.

Q. Did you receive any instructions as to how you were to use them in your business?

A. In my own mind at that time, I had no doubt——

Mr. Brown: I would like to have you answer the question.

The Court: Wait a minute. You are not answering the question.

(Question read.)

The Court: Now what was in your own mind.

A. A discussion of the schedules amounted to instructions as to their use.

Mr. Jaspert:

Q. What were those instructions?

A. One of the schedules was a user price list which established the price of material under the license, by various sizes and various quantity brackets and terms and conditions of sale. The other list was a distributor price list which for the most part contained the same list of prices for users per pound. I think the same conditions as to terms and conditions of sale. In addition to that, in the distributor price list there was and is a list of discounts given to the distributors, applying to the various quantities they bought, the discounts being discounts from the user [fol. 84] price list. There was between Mr. Seastone and myself some discussion as to the schedules of discounts, in that they were so radically different from the schedule of discounts that had been in effect to distributors prior to that.

Q. With reference to the distributor price list 26-826, why does that contain the instructions: "Prices to the user are determined by the aggregate weights on individual orders, authorized for unit shipment to one destination"?

A. I don't know why it was in there.

Mr. Brown: I move to strike out the answer.

Motion granted.

Exception noted.

Mr. Jaspert:

Q. What did you do with these price lists that Westinghouse furnished you on July 11th, 1940?

A. Both price lists?

Q. The user and the distributor price list.

A. Well, the first thing I did was recopy them verbatim except substituting the trade name of our product where the Westinghouse trade name appeared. That was the first thing, and we made similarly two lists, one which I called the user price list and another which I called the distributor price list. Both of these lists were sent to our distributors.

Q. You sent both the user and distributor price list to the distributors?

A. That is right, and in some cases where large users would ask for the price list, we would send them the user price list.

Q. Did you ever have any difficulty with Westinghouse [fol. 85] regarding the enforcement of these price lists?

A. Yes.

Q. In what respect?

A. Many of the difficulties were on the matter of the prices at which our jobbers were selling the material.

Q. Who raised these questions by Westinghouse?

A. The individual do you mean?

Q. Yes, or what department?

A. The first instance of that that I recall was shortly after the signing of the license, when Mr. Savage called me and asked me to come out to his office for a discussion of some matters.

Q. Did you go?

A. Oh, yes.

Q. Do you recall who was present at the conference?

A. I don't recall all of them. I recall Mr. Savage was there, of course, and Mr. Reddy.

Q. Was Mr. Seastone there?

A. There was one conference with Mr. Seastone. I think there were two conferences in Mr. Savage's office and I know Mr. Seastone was at one of them. I don't know for certain if he was at this second one, although I think he was.

Q. What transpired at this conference with reference to the price lists and schedules?

[fol. 86] Mr. Brown: I would like an offer of what you are trying to prove.

Mr. Jaspert: I am trying to prove that Westinghouse at all times seriously contended for the enforcement of this price schedule, down to the re-sale price.

Mr. Brown: Your object is to impeach the testimony of Mr. Seastone?

Mr. Jaspert: That is beside the point. He did not say that there were not such things. In reply to one specific question of the New England dealer, he said he did not recall. I can't impeach his testimony on anything Mr. MacGregor meant as to their quarrels about price schedules.

Mr. Brown: I don't want to be in a position of trying to keep anything from the Court. So I am not going to press the objection at this time, although I think it is improper testimony.

(Question read)

A. This was a conference shortly after—it was in the early part of 1938 shortly after the signing of the license. At that time I had a distributor by the name of Corbett and Alfson, to whom I sold our product, and at this conference in Mr. Savage's office there were several questions asked [fol. 87] regarding—asked me in the nature of a complaint as to what prices Corbett and Alfson were quoting various customers, even after the license had been signed and agreed to by me. That in general——

Mr. Jaspert:

Q. Were there any other conferences in regard to the price schedules after that?

A. There have been many conferences. Well, several conferences. The price schedules were not in each of these conferences the main issue or the main point in the conference, but they were mentioned incidentally. The conferences began in the patent department on July 11th, 1940, at which other matters were discussed, including the question of audit, including the question of the silver alloy, and the presentation at that time of these price schedules, and there was discussion there as to the meaning of the distributor price schedule, and they left me in doubt as to my action that I was obliged to follow under the agreement.

Q. Was there at any other time any accusations of cutting prices by you, your distributors or anybody else?

A. That had been mentioned, as I say, incidentally, but in that first conference in Mr. Savage's office there was no question in my mind that I was to attempt to regulate the prices, the list prices and get Corbett and Alfson to adhere to these list prices, which I seriously attempted to do.

Q. Was there ever a direct issue on the question of whether your jobbers were following the list prices on [fol. 88] re-sale? Was that question ever raised by Westinghouse?

A. Yes, it has been raised, by the nature of the questions that I was asked at the conferences.

Q. Did anyone ever accuse you of violating the re-sale prices on that account, through your distributors not maintaining the price schedules?

A. I don't know that it was an accusation of violation but it was more in the nature of an admonition for me to correct that disturbance.

Q. But there were such questions raised at these conferences, that is, questions involving the maintenance of the re-sale prices. Is that correct?

A. Yes.

Q. What has been your experience in the field of metallurgy?

A. In length of time?

Q. Yes, and the kind of work that you did.

A. I have been directly and indirectly connected with it since about 1914.

Q. Almost thirty years?

A. Yes.

Q. Any particular field that you worked in?

A. I was a chemist for many years.

Q. I am speaking of metallurgy.

A. Well, analytical chemist in connection with the manufacture of metallurgical products.

Q. Did you work with non-ferrous or ferrous alloys?

A. Non-ferrous.

[fol. 89] Q. You are familiar with the Jones Patent here in suit?

A. I have read it.

Q. What is meant by the eutectic alloy of two metals?

A. I can give you what I understand it to be.

Q. That is good enough.

A. I conceive of the eutectic of two metals as that proportion of the two metals which gives a melting point lower that either one alone.

Q. In the Jones Patent when he says: "I have found that such low phosphorous copper alloys, more specifically the eutectic alloy which melts at about 707 degrees Centigrade and contains about 8.27 percent of phosphorous, are especially suitable for brazing copper or copper alloys", he is speaking of a very definite relationship of the two metals, is he not?

A. If he is speaking of the eutectic of the two metals, he is speaking of a definite relationship.

Q. Is it not general knowledge to a metallurgist of nonferrous alloys that the eutectic of copper and phosphorous is 8.27 phosphorous and 707 degrees melting temperature?

A. Yes.

Mr. Brown: I would like to ask the purpose of that particular question.

Mr. Jaspert: Mr. Brown has not discussed his patent at all. I think your Honor should be to some extent familiarized [fol. 90] with the substance of that patent and if the defendant's alloys are possibly within the scope of those patents because after all there is no basis here for the plaintiff's claim unless the defendant's alloys comes within some valid claims on that Jones Patent.

Mr. Brown: I don't want to seem to obstruct the examination. If that is just the general background, it may be interesting. Our position is that this case is on a license contract for royalties, and that in such a case the patent must be taken for what it means on its face, or unless it requires expert testimony or there is some ambiguity. I think this testimony should be directed to some particular point. That point I would like to know now so I will know how to object.

The Court: It is my theory that if he is trying to show and can show that the Jones Patent establishes one thing whereas the two alloys patented by Mr. MacGregor are something different and not within the comprehension of this phraseology in the Jones Patent, that may be relevant, but I don't know whether that is what he is trying to do.

Mr. Jaspert: That is what I am trying to do.

[fol. 91] Mr. Brown: Are you offering Mr. MacGregor as a metallurgical expert?

Mr. Jaspert: In this field, I am.
Mr. Brown: Will you qualify him?

Mr. Jaspert:

Q. How many years experience have you had with copper alloys, Mr. MacGregor?
A. Well, almost thirty years. Approximately thirty years. I have had experience with copper alloys ever since I started to work.
Q. What has been your general line of experience? Did it have to do with the metallurgical phase of these alloys?
A. Yes. I don't know just what you mean by that question.
Q. You say what you think I mean and if it is not right I will ask you another question.

The Court: Wait a minute. We don't want the witness to say what he thinks you mean. Your questions should be clear enough for him to answer them.

(Question read.)

A. My general line of experience having to do with the metallurgical phase of these alloys? Which alloys?
Q. Copper alloys.
A. Yes.
[fol. 92] Q. Do you know the effect of compounding phosphorous and copper in various proportions?

Mr. Brown: That is a large question.

A. It is a large question. I know some of the phenomena or characteristics. Of copper phosphorous alloys, I would not presume to say I know them all, by any means.

Mr. Jaspert:

Q. Do you know from your own knowledge and experience what effect a variation in the percentage range of say from one to ten percent phosphorous would have on the physical properties of copper, say for example, as far as brittleness goes?

Mr. Brown: What is the purpose of that question?
Mr. Jaspert: To qualify him.
Mr. Brown: I assume the answer will be only for the pur-

pose of qualifying the witness. I object to the question unless it is limited purely to developing the qualifications of the witness.

Objection sustained.
Exception noted.

Mr. Jaspert: I will offer it as a qualifying question.

(Question read.)

A. As far as brittleness goes, I would have some general idea of the effect.

Q. Have you made any tests or actual experiments along [fol. 93] this line? You would not have to guess. You know the effect of that on copper, do you not?

A. If you define what brittleness is, I have made some tests which could be construed as a measure of brittleness for alloys in that range.

Q. What did you call it? Ductility? The tests that you made, were they with reference to the ductility of these combinations?

A. I thought of it in respect—my interest in the test was to determine the malleability or rollability.

Q. That was with copper alloys having varying proportions of phosphorous?

A. That's right.

Q. Now, Mr. MacGregor, the Jones Patent, in addition to describing the eutectic alloy of copper and phosphorous as suitable for brazing copper or copper alloys, states that a phosphorous copper alloy containing six to nine percent phosphorous is likewise suitable with that range of six to nine percent include the eutectic alloy of copper and phosphorous?

A. Assuming Mr. Guilliver——

Mr. Brown: I object to that.

Mr. Jaspert:

Q. I am not asking you with reference to Gulliver. I am talking about the Jones Patent and what we have defined as the eutectic of copper.

A. If the eutectic is 8.2 or 8.3, whatever it is, then that [fol. 94] apparently and obviously comes between six and nine. Is that the answer?

Q. That is the answer. Would the eutectic alloy of copper and phosphorous also come within the range that contains ten percent or less of phosphorous?

Mr. Brown: I object to that. That is just playing checkers. He is saying, does 8.3 come between one and ten. That seems to me to be utterly immaterial. I think it is vague and indefinite and immaterial.

The Court: The Court is not concerned with what may have been in the patent at one time. We are concerned with the patent as it is here.

Mr. Brown: The Court may be concerned with the file history of the patent, if there may be such a thing, as to estop us, but nothing that has been developed in this case at this time makes it pertinent.

(Question read.)

A. Yes.

The Court: I thought that was answered in the preceding question when you gave the eutectic and stated the amount of copper in the composition.

Mr. Jaspert:

Q. I hand you a publication marked defendant's Exhibit [fol. 95] H, metallic alloys, pages 283 and 284, and ask you if you can identify it?

A. I have seen this before.

Mr. Jaspert: Before I further interrogate the witness I wish to offer in evidence the file wrapper history of the Jones Patent, certified by the United States Patent Office, which is marked defendant's Exhibit A.

Mr. Brown: No objection.

Mr. Jaspert:

Q. Will you identify that publication by name?

A. By name it is "Metallic Alloys", is the name of it.

Q. Who is it published by?

A. This does not say, but it looks exactly like one I have seen published by Gulliver. I don't say that it says Gulliver.

Q. In the paragraph numbered 82, is there any reference there to the eutectic alloy of copper and phosphorous?

A. Yes.

Q. Will you read that into the record, please?

Mr. Brown: Are you going to put this Exhibit in the case?

Mr. Jaspert: Yes.

Mr. Brown: There is no objection to it as an Exhibit [fol. 96] but may I ask what is the purpose of inquiring of him as to what is in this particular publication?

Mr. Jaspert: To inform the Court of the metes and bounds of this patent.

Mr. Brown: I think the Exhibit itself is the best evidence.

(Question withdrawn.)

Q. Do you find in that publication a description of the eutectic of copper and phosphorous alloys?

Mr. Brown: Would you mind offering this as an Exhibit and state the purpose of the offer before further examining the witness?

Mr. Jaspert: It is already in the case history.

Mr. Brown: Is it your position that you are not going to offer this specifically?

Mr. Jaspert: I offer in evidence a file wrapper history of every prior case that is referred to in that history.

Mr. Brown: We have a right to know what is in it. The offer of a file history does not include a reference unless it is specifically offered.

[fol. 97] Mr. Jaspert: I offer as defendant's Exhibit H for the purpose of proving that the specific alloy named in the Jones Patent was old as shown in the publication to Gulliver in 1913, having a eutectic of 8.27 phosphorous and a melting point of 707 degrees Centigrade.

Mr. Brown: Assuming that is the purport of the Exhibit, for what purpose is it offered? In other words, are you attacking the validity of the Jones Patent?

Mr. Jaspert: At this point I am not. This Court can not go back of the Patent. We have no jurisdiction in that. The Patent was granted by the Patent Office of the United States Government. This Supreme Court case that I referred to this morning says this: "Local rules of estoppel which would fasten upon the public as well as the petitioner the burden of an agreement in violation of the Sherman Act must yield to the Act's declaration that such agreements are unlawful, and to the public policy of the Act which in the

public interest precludes the enforcement of such unlawful agreements."

The Court: What has that got to do with Gulliver?

Mr. Jaspert: It is our position that in this case we are allowed to attack the validity of this patent. We are allowed [fol. 98] to introduce any competent evidence showing the illegality of this agreement, and the Supreme Court specifically said, "Including proof of the invalidity of the patent".

The Court: You should prove first that the license agreement was illegal because it violates the Sherman Anti Trust Law. Secondly, you ought to prove that any combination of metals used by Mr. MacGregor, does not come within the combination set out in the Jones Patent. Those are two different things. As I see your case, you are trying to hit both those things. So far you haven't hit either one. You are still dealing with the question that relates to illegality under the Sherman Anti Trust legislation. You haven't touched on the second proposition at all.

(Question read.)

Mr. Brown: Objected to as immaterial. It is a written publication and it is the best evidence.

Objection sustained.
Exception noted.

Mr. Jaspert:

Q. Do you find in the publication to Gulliver the exact same formula of eutectic of copper and phosphorous as given in the Jones Patent?

Mr. Jaspert: The Exhibit is further offered as showing the state of the art at the time the Jones Patent was granted. [fol. 99] Mr. Brown: We object to Exhibit H insofar as it is offered for the purpose of attacking the validity of the patent in suit because of the license and patent, because the defendant, as at the present time and by his pleadings, stills holds onto the license under the patent, he is therefore under his general conditions estopped to question the validity of the patent. We further object to it as immaterial under anything that has been proved at this time, that might make an exception to that established rule of estoppel.

Objection sustained.
Exception noted.

(Question read.)

A. Yes.

Q. Does a brazing solder of copper and phosphorous, having from six to ten percent phosphorous, include the eutectic of 8.27 phosphorous?

A. Yes.

Q. Does a brazing solder of copper and phosphorous, melting between 700 and 900 degrees Centigrade, have the eutectic of 8.27 phosphorous in its range?

Mr. Brown: I object to that. I don't know what he is driving at. There is no antecedent that I know of. I object to the question as indefinite.

Mr. Jaspert: I am reading from claim two of the Jones Patent which calls for a brazing solder having a melting [fol. 100] point between 700 and 900 degrees Centigrade. I am asking the witness whether or not within that range, the 8.27 percent phosphorous would melt.

The Court: He has already answered that.

Objection sustained.
Exception noted.

(Question withdrawn.)

Q. Would the eutectic of copper and phosphorous stated at 8.27 percent phosphorous melt within the range of 700 to 900 degrees Centigrade?

A. Yes.

Q. Would a eutectic alloy of copper and phoshorous, with 8.27 percent phosphorous and the balance copper, have a ratio of more than four to one of copper?

A. Yes.

Q. (Mr. MacGregor, do you employ any alloys that you make, in any method of uniting objects of copper?

A. No. Do we use them or make them?

Q. Do you use them?

A. No, we don't use them.

Q. Now, with reference to your patent number, 2,125,680, you claim an alloy containing from two percent to 8.3 percent phosphorous and from 0.25 percent to 0.75 percent tin and the balance substantially of copper. Now, would the two

percent phosphorous come within the eutectic alloy of copper and phosphorous as 8.27? Would it come within the six to ten percent phosphorous range?

[fol. 101] A. There is something different here. When you are talking of eutectic alloys you are talking of proportion of two alloys, two metals, two elements. That is my understanding of it, at least. When you introduce a third element you have disturbed—at least you are not talking about the Binary.

The Court:

Q. You don't have an alloy unless you have two metals?

A. That is essentially correct. At least two. When you are talking of copper and phosphorous eutectic, then I could only see possible confusion by trying to draw a parallel or comparison between a copper and phosphorous alloy system, but a copper phosphorous alloy and tin, those are two separate and distinct things. So I don't know that I can answer that question directly.

Mr. Jaspert:

Q. With reference to your patent number 2,162,627, an alloy comprising phosphorous copper and silver, what is the melting range of that alloy?

A. There you have a—any copper phosphorous and silver combination, which is a third element system again, there we start with—the melting occurs according to the authorities I think at 1190 or 1195, which is the equivalent to about 640—I am not certain of these figures—645 or thereabouts, Centigrade.

Mr. Jaspert: I hand you patent number 1,103,482, marked defendant's Exhibit C, which I offer in evidence as part [fol. 102] of the file wrapper history of the patent.

Mr. Brown: Are you offering this to attack the validity of the Jones license and patent?

Mr. Jaspert: Both.

Mr. Brown: I object to it insofar as it is offered for the purpose of attacking the validity of the patent.

Objection sustained.

Exception noted.

Mr. Jaspert: I also offer the patent for the purpose of showing the state of the art.

Mr. Brown: No objection to it for showing the state of the art.

Mr. Jaspert:

Q. How does the alloy described by Canzler compare with the silver alloy described in your patent?

Mr. Brown: I object to that unless there is some ambiguity of some kind. The MacGregor patent describes his silver and the Canzler patent describes what is disclosed in it. It seems to me it is secondary evidence to have this witness tell you what it is.

Mr. Jaspert:

Mr. Brown said he was going to argue the question of infringement. He has not proven it. I would like to prove [fol. 103] and not argue, that we do not infringe, and I am allowed to show what the state of the art was at the time of this alleged invention by Jones.

Mr. Jaspert:

Q. Mr. MacGregor, I will ask you whether there is any similarity or difference between the copper phosphorous and silver alloy in your patent and that of Mr. Canzler?

Mr. Brown: We object to the witness taking these two documents and telling the Court what is in them. I think your Honor would have to read them.

Objection sustained.
Exception noted.

Mr. Jaspert:

Q. For what purpose do you utilize the phosphorous in your patent pertaining to the silver alloy? That is patent number 2,162,627?

Mr. Brown: Objected to as immaterial.

Objection sustained.
Exception noted.

Mr. Jaspert:

Q. Why do you use the combination of copper and phosphorous as described in your patent?

Mr. Brown: Objected to.

Objection sustained.
Exception noted.

[fol. 104] Mr. Jaspert:

Q. Why do you add silver to copper and phosphorous in the proportions stated in your patent?

Mr. Brown: I object to that if the purpose is to prove anything other than stated in the patent itself, which is already in evidence.

The Court: We will permit him to answer that.

Objection overruled.
Exception noted.

(Question read.)

A. To attain the particular physical characteristics that I was seeking at the time.

Q. And what do you mean by that?

A. Primarily I mean the characteristics of fluidity at a temperature lower than other materials being used at that time.

Q. What is the temperature? Is that specified in the patent?

A. The temperature is not specified.

Q. What is the temperature at which that silver alloy melts?

A. I think I said it starts to melt at a temperature of approximately 640 or 645 Centigrade, or if I recall correctly, I think that is 1195 or thereabouts Fahrenheit.

Q. It is below 700 degrees Centigrade, isn't it?

A. 640 is below 700.

Q. I mean the melting temperature of your silver alloy is below 700 degrees Centigrade?

A. That's right.

[fol. 105] Q. What is the general function of phosphorous in a brazing solder?

A. To lower its melting point, I think.

Q. Does it have any other properties when used as a solder, with copper?

A. I think the primary consideration in any solder is its melting point in relation to the materials with which it is to be fused. The melting point should be lower. There should be a certain leading or joining ability possessed by any solder. I don't know that I thoroughly understand what is sought by the question, but the charactertstics of solder as I see it right offhand, are low melting point and leading ability.

The Court:

Q. That would be true of any kind of solder?

A. Yes.

Mr. Jaspert:

Q. What is the chief difficulty encountered in soldering or welding with metals?

A. The chief difficulty? I don't know that I understand.

Q. What is your main problem when you try to bring two metals together under heat?

A. I don't think it presents any problem.

Q. Did you ever hear of oxidation? Does phosphorous added to copper, affect the oxidation qualities of alloy in soldering or welding?

A. Phosphorous, of course, has an effect upon the oxidation.

Q. What effect does it have?

A. It apparently has the effect of neutralizing or reduc- [fol. 106] ing oxidation formed by the temperature of the solder.

Q. How much phosphorous would be required as necessary to bring about such effect of de-oxidizing or prevenfing oxidation?

Mr. Brown: I object to that.

Objection sustained.
Exception noted.

Mr. Jaspert:

Q. What are the differences in characteristics of the solders of your patents and that of the Jones Patent?

A. The difference in characteristics of the solders of my patent and the Jones Patent?

Q. Physically, chemically and otherwise.

A. I think there are several differences. In the case of the tin alloy the difference there between the copper phosphorous tin alloy as I have been employing it and what I have understood to be the Jones alloy, is probably—the greatest difference is in the malleability or ductility or toughness, if you would call it by that name. I think that difference is in favor of the alloy I have been making.

Q. In other words, your alloys have definite recognizable characteristics?

Mr. Brown: I object to that as leading.

Objection sustained.
Exception noted.

(Question withdrawn.)

[fol. 107] Q. Is this likewise true of your copper phosphorous silver alloy?

Mr. Brown: I object to that as leading.

Objection sustained.
Exception noted.

Q. What is the difference in the melting points between the Jones alloy and the copper phosphorous and tin alloy of your patent? Is there any difference?

A. Yes, there is a difference.

Q. Is there any difference in the fluidity?

A. If the melting point is any measure of fluidity, the answer is yes.

Q. Ductility?

A. I would say little, if any, difference in respect to ductility.

Q. Is there any noticeable difference in mechanical strength?

A. I would say no. I don't know what I am supposed to—when you are comparing alloys of this type, whether they be the Jones alloy or the MacGregor copper phosphorous tin alloy or the MacGregor silver alloy or other alloys which are on the market, belonging to the same general family of alloys, there are many, many points of

similarity between various ones and there are points of difference between the various ones.

Mr. Brown: I object to that answer and move to strike it out as unresponsive, irrelevant and immaterial.

[fol. 108]-- Objection sustained. Motion to strike out is granted.

Exception noted.

Mr. Jaspert: I next want to go into the question of damages. I have quite a list of questions here to ask this witness as to the damages he sustained through the plaintiff's practice of price fixing, under its patent.

Mr. Booth: I don't see that there is anything in the pleadings to bring up this issue at all on the question of damages.

Mr. Jaspert: The ninth paragraph of the answer. The Sherman Act provides for it, and on our pleading of a violation of the Sherman Act.

Mr. Booth: Our position is that he has not pleaded under the Sherman Act, any account for damages.

The Court: That brings us to the basic question that was raised at the start. I will reserve my ruling on that question until tomorrow.

Here Court adjourns to Thursday, March 25, 1943.

[fol. 109] Thursday, March 25, 1943.

Alpine R. MacGregor, the defendant, resumes the stand and testifies further as follows:

Mr. Jaspert: I will offer in evidence defendant's patent number 2,125,680 marked as Exhibit M; patent number 2,162,627, defendant's Exhibit N, and the Gulliver publication, defendant's Exhibit H.

Mr. Brown: I think that was offered yesterday and the objection was sustained. May we assume that it is put in without objection, to show the state of the art, over objection insofar as it is relied upon to attack the validity of the patent?

The Court: It seems to me the only object those prior patents can have is to show the art. In other words, to show that mixing copper and phosphorous is not anything new

and perhaps the eutectic is not new, and the same would be true with Gulliver.

Mr. Brown: We have no objection to any of these Exhibits if offered to show the state of the art and to limit the scope of the licensed patent. We do object to them if they are to be used to attack the validity of the patent.

[fol. 110] Mr. Jaspert: That after all is a question of law. It is up to the Court to determine whether the patent is legal.

Mr. Brown: May I suggest that these Exhibits be received, subject to our objection insofar as they are offered to attack validity, that objection to be ruled upon in the final argument of the case.

Mr. Booth suggests I should, to make my objection complete, state that our position is that they are immaterial, irrelevant and incompetent insofar as they are offered to attack validity of the patent, first, because the defendant is estopped to deny validity, being a licensee, and secondly, because even if they were to show invalidity of the patent or invalidity of the agreement, the invalidity is separable and divisible subject matter and therefore not justifying an attack upon validity.

Objection overruled.
Exception noted.

Mr. Jaspert: I offer in evidence patent to Dandelin number 989,573, defendant's Exhibit B; patent to Canzler, number 1,103,482, defendant's Exhibit C, and patent to Maxon, number 532,890, defendant's Exhibit D.

Mr. Brown: May it be understood that the same objection and the same ruling applies to these Exhibits B, C and D?

[fol. 111] The Court: Yes.

Mr. Jaspert:

Q. Mr. MacGregor, with reference to the proportions stated in the Maxon patent, what percentage of the whole is the amount of phosphorous therein specified?

A. This is equivalent to five percent of phosphorous.

Q. How do you calculate that?

A. There is a total of sixty parts specified, of which three parts are phosphorous. That is equivalent to five percent of the whole.

Q. Would you consider the five percent phosphorous contained in a solder as an essential ingredient or as an impurity?

Mr. Brown: I object to that as indefinite because you haven't indicated what the other ingredients would be in there and I think Mr. MacGregor would tell you that he would have to know the other ingredients to know the effect of the phosphorous.

Objection sustained.
Exception noted.

Mr. Jaspert:

Q. With reference to the solder described in the Maxon patent, would you consider five percent phosphorous contained, to be an essential, or would it be a mere impurity in that solder?

[fol. 112] Mr. Brown: I object to that as immaterial. The Maxon patent is not involved here except as showing the state of the art. I think if you want to ask Mr. MacGregor whether or not the Maxon patent describes a solder and what the characteristics are, that is material, but this question does not seem to have any materiality or to mean anything, regardless of the answer.

The Court: It seems to me immaterial.

Mr. Jaspert: It is material in this way: Mr. Brown is relying upon the statement "main and essential ingredients" of claim four of the Jones Patent.

The Court: He has indicated to you a way in which you can frame your question to perhaps make it material. Standing alone, it is a question relating to this particular patent which is not basically in issue. It is only in issue for certain purposes perhaps.

(Question withdrawn.)

Q. Mr. MacGregor, why did you discontinue the payment of royalties on the copper phosphorous tin alloy to Westinghouse?

A. I discontinued the payment of royalties on the copper phosphorous tin alloy to Westinghouse under advice of Mr. Jaspert.

Q. I hand you a letter dated February 12th, 1941, addressed to Mr. A. R. McGregor, signed William B. Jaspert,

[fol. 113] and marked for identification as defendant's Exhibit J, and ask you whether that was the advice that you followed?

Mr. Brown: If this question is leading to the introduction of that letter we object to it because it was a purely self-serving statement by counsel to his client, in which he argues a question of whether or not there is liability and so forth, and certainly it has no part as evidence in this case. Insofar as Mr. MacGregor stating that he received advice not to continue paying royalties, by letter from Mr. Jaspert, we have no objection, for that fact and for no other fact, but we object to the letter as evidence.

Objection sustained.
Exception noted.

Mr. Jaspert:

Q. What brought about this question that you sought advice upon? What was the situation that prompted you to consult your attorney in the matter of paying this royalty?

A. I was told by the Westinghouse people that my alloy, which we might refer to as the silver alloy, and there is a patent number applying to it, I don't recall th number——

Q. Defendant's Exhibit M?

A. Exhibit M, came within the scope of the Westinghouse patent number, which is the subject matter of the license agreement.

Q. The Jones Patent?

[fol. 114] A. The Jones Patent, and that I should henceforth pay royalties upon that silver alloy and observe all the other conditions of the agreement applying to the silver alloy and in addition, pay back royalties.

Q. Was that back royalties on the silver alloy?

A. On the silver alloy.

Q. In other words, they wanted royalties from the time you began to manufacture the silver alloy?

A. That's right. That I conceive of as at least a matter of opinion, whether or not the silver alloy did come within the scope of the Jones Patent, and stated in a conference at Westinghouse, that I should like to submit it to counsel for an opinion.

Q. And as a result of that opinion, why did you discontinue the payment of the royalty on the tin solder as well?

A. Because in the opinion given by Mr. Jaspert pertaining to the relationship between the silver alloy and the Jones alloy, it was his conclusion, as I recall in substance, that the evidence which he disclosed and presented, supporting his contention that the silver alloy was not embraced within the scope of the Jones Patent, that evidence applied with equal force to the tin alloy which I was making under my other patent, Exhibit M, and its relation to the Jones alloy.

Q. What did you do to notify Westinghouse that you would discontinue such royalty payments and that you would not pay under the silver alloy?

A. That, as I recall, was covered in a letter by Mr. [fol. 115] Jaspert to Westinghouse, I believe directed to Mr. Savage. I am not sure of that.

Mr. Jaspert: I offer the letter in evidence as defendant's Exhibit K.

Mr. Brown: We have no objection to the letter as to authenticity or as to its sending and receipt. We have no objection for the purpose of showing a definite notice from MacGregor to Westinghouse that thereafter he refused to pay royalties or to account. We do object to some of the self-serving arguments of the attorney who wrote the letter included in it. We have no objection to it being received subject to it not being evidence.

The Court: We will receive it with that limitation.

Mr. Jaspert:

Q. Mr. MacGregor, do you have a statement showing the royalties that you had paid for the copper, phosphorous and tin alloy?

A. Yes, sir.

Q. Was that prepared under your supervision?

A. That's right.

Mr. Jaspert: This was marked at the Pre-trial as defendant's Exhibit O. It is a statement of account. I don't believe it is in, your Honor.

The Court: Yes, it is.

[fol. 116] Q. What is in the envelope, Mr. MacGregor?

A. These are cancelled checks.

Q. Checks that you paid Westinghouse?

A. Yes.

Mr. Jaspert: It is offered in evidence to show that these payments were made by MacGregor to Westinghouse. That is all.

The Court: I should think Westinghouse would be willing to admit that he made payment. I thought that was already in the record, from the pleadings.

Mr. Brown: We have no objection to these payments being made. The only reason we feel we might have to object is that there is no proper counter claim set up here, and this is evidence supporting a counter claim. There is certainly nothing in this to show it was paid by mistake. For the purpose of showing the payments were made, we have no objection.

The Court: It is admissible for the purpose of showing payments actually made to Westinghouse but not admissible for the purpose of showing an account due by Westinghouse to the defendant.

Mr. Brown: Mr. Jaspert asked the witness about the Canzler patent and, as I recall, and as I then understood his question, he asked him to compare the disclosures of the [fol. 117] Canzler patent and of the MacGregor patent, Exhibit N, and I objected on the ground that it was asking the witness merely to compare two written documents, which was for the Court. Since then it has appeared that the Canzler patent is the principal difference here by way of justifying the product that MacGregor has made, that is, the silver product, and also in checking up last night I found that certain things that should properly be before the Court, perhaps do not appear on the face of the Canzler patent. I would therefore like to withdraw my objection and permit Mr. Jasper to examine the witness as to the disclosure of the Canzler patent and the comparison of it with the silver phosphorous and copper alloy patent Exhibit N.

Mr. Jaspert: We would now like to proceed with the question of damages. I would like to read into the record the section of the Sherman Act providing for damages.

(Discussion.)

Mr. Jaspert: Section 7 of the Sherman Act which provides: "Any person who shall be injured in his business or property by any other person or corporation by reason of anything forbidden or declared to be unlawful in this

Act, may sue therefor in any circuit court of the United States, in the district in which the defendant resides or is [fol. 118] found, without respect to the amount in controversy, and shall recover three-fold the damages by him sustained, and the costs of suit, including a reasonable attorney's fee." On the basis of that provision of the Act, I would like to offer testimony showing the damages to the defendant's business as the result of the enforcement of the price fixing clause under the license agreement, by Westinghouse.

Mr. Brown: We call attention to the fact that the statute which has been read to the Court and which, of course, you would take judicial notice of anyhow, says that the plaintiff may sue therefor in any circuit court of the United States in the district in which the defendant resides or is found. That is the jurisdiction of the Court, and that Act was passed in 1890, and the jurisdiction of the Circuit Court of the United States has now been assumed by the District Court of the United States, so that on the very statute that has been read, Mr. Jaspert has read himself out of this Court insofar as an active suit against the Westinghouse Company to recover damages under the Sherman Act is concerned.

The Court: Objection sustained.

Exception noted. The defendant is not permitted to offer evidence relating to damages.

[fol. 119] Cross-examination.

Mr. Brown:

Q. Mr. MacGregor, as I understand it, you have been familiar with and have worked with copper alloys for some thirty to forty years. Is that right?

A. To some extent, yes.

Q. And have you during that same period of time worked with and been familiar in a practical way with the use of solders for non-ferrous metals?

A. That is also true to some extent.

Q. In a general way?

A. In a general way, yes.

Q. And in a practical way as they were used in the plants with which you were associated?

A. I would answer yes. I would like to add one little qualification. I simply do not want to attempt to pose as

an expert in any of these matters. I have some knowledge and I recognize that it is limited, and there may be some phases of this that are beyond my understanding and beyond my knowledge of facts. To the extent with which I am familiar, I readily can answer yes to that.

Q. Please understand, Mr. MacGregor, that I have no desire whatever to humiliate you in any way. As I understand, you do not pose as a technical and metallurgical expert in this art?

A. I am not an expert.

Q. You disclaim that?

A. Yes.

Q. But on the other hand you have had an extensive [fol. 120] practical experience with the use of solders of the kind we are talking about here?

A. If that is limited to a more or less extensive familiarity, then the answer is yes.

Q. How far back does that familiarity go?

A. It goes back to approximately 1914.

Q. So that you have in a general way been familiar with this art of soldering non-ferrous metals since about 1914?

A. Yes.

Q. When was your first knowledge of a phosphorous copper solder for use in soldering or brazing copper metals, obtained?

A. My first knowledge of phosphorous copper——

Q. I didn't ask you that.

(Question read.)

A. Well, I can't answer that definitely as to date.

Q. I will ask you this: Isn't it a fact that it was obtained at the Westinghouse Company and it was the knowledge of their phos-copper solder about which we have talked in this case?

A. I certainly observed it then.

Q. Isn't that your first observation of such a solder?

A. If you will limit it to its observation of that material, under the terms and differences of what is a solder, then the answer there would seem to be yes.

Q. Mr. MacGregor, while you were with the Westinghouse [fol. 121] Company wasn't it one of your duties to supervise or have some general supervision over the making of that phos-copper solder in the Westinghouse Company?

A. Mr. Brown, that statement was made yesterday and it was not in accord with my understanding of my duties at that time.

Q. Please correct me then. If I have misstated you, I am sorry. I will give you a chance now to correct my impression.

A. My recollection of the period that I was employed at the Westinghouse, and I am very sincere in this, that I know of no time during all that employment that I specifically had anything official to do with the phosphorous copper alloy. That is, I had no direction of it. I will mention several instances. I asked to be allowed to have some interest in it but other men had been assigned specifically to that job and never at any time was phosphorous copper my job at Westinghouse.

Q. All right. You were familiar, however?

A. I was familiar with its existence.

Q. You were familiar with its existence. Were you also familiar with its composition?

A. Yes.

Q. Were you familiar with its practical uses?

A. Yes.

Q. Were you familiar with the class of people that used it and the work for which they used it?

A. To some extent.

Q. Didn't you at one time or another urge people to use the Westinghouse phos-copper solder as being a superior [fol. 122] product as compared to others that were available on the market?

A. I think I have, that is, out there, urged or at least attempted to suggest in certain cases that phosphorous copper might be used.

Q. Please don't quibble with me.

A. I am not trying to quibble, Mr. Brown, but I just want to be sure that I answer the question accurately. That is all.

Q. Excuse me. Answer it to suit yourself and tell me when you are through.

A. Could the question be stated again?

(Question read.)

A. I think I have stated in substance that on occasions I have suggested out there the use of phosphorous copper. I would like to qualify and say that not in all those instances, however, did that imply that phosphorous copper was a

superior product to others on the market. Where I did suggest its use, it was limited to cases where in my opinion the use of that particular type of solder seemed permissible without respect to its merits of comparison to any other types of solder.

Q. Do you have any recollection of having ever urged any of the Westinghouse departments to use the Jones phos-copper solder in preference to other commercial solders that were available on the market?

A. I don't have a recollection but I may have done it.

[fol. 123] Q. You think it is entirely possible that you did?

A. Yes.

Q. That is, that is consistent with your attitude and knowledge at that time?

A. I think that is so then.

Q. Which means that at that time you thought that the Westinghouse phos-copper solder was a good commercial product and as good as or better than other available commercial solders. Is that right?

A. I felt it was a suitable commercial product for certain cases.

Q. Can't you answer my question yes or no and then explain?

A. I feel it is difficult to answer that yes or no. You say "as good or better". For some applications it may have been as good. For other applications it may not have been as good. You can't cover blanket cases, a large number of individual cases by any blanket questioning.

Q. You do not question the fact, Mr. MacGregor, that the Jones phos-copper solder as made by Westinghouse while you were employed there, was a good workable valuable solder, and useful in this art, do you?

A. I will not question that.

Q. And you do not question the fact that your first knowledge of that solder in the practical art, was obtained from seeing it at Westinghouse?

[fol. 124] A. I think I have already answered that, with the limitation as respecting solder.

Q. Although your experience in the art went back to 1914?

A. That's right.

Q. Now, when did you leave the Westinghouse Company?

A. I think it was May, 1936.

Q. May 31st, was it not?

A. It may have been. It was thereabouts.

Q. Don't you know? If I told you the record shows it was May 31st, you would not deny that?

A. I would accept that statement.

Q. When did you apply for copper phosphorous tin alloy patent?

A. It was shortly after that.

Q. If I said to you it was June 6th, 1936, would you agree with that?

A. If the record shows that, then that is evidence in itself.

Q. Now, Mr. MacGregor, you had a contract with the Westinghouse Company under which it was provided that any inventions made during your employment with that company should be assigned by you to the Westinghouse Company?

A. I remember signing—I assume it was a contract. What its contents were, I do not remember.

Q. You just don't remember whether you had such a contract or not? Remember, this is cross examination and [fol. 125] this is partly to test your memory, accuracy and frankness.

A. And I do not intend to avoid anything. You made a statement that certain things were in that contract. I am not disputing they were in there. I simply don't recall just what was in there.

Mr. Jaspert: I would like to have Mr. Brown state the purpose of this.

Mr. Brown: This is cross examination.

The Court: I can't see the materiality, Mr. Brown, of this contract.

Mr. Brown: Only as affecting the credibility of the witness and the weight to be given his testimony.

The Court: I think it is going a little far afield.

Mr. Brown: We disclaim any attempt to recover the patent. This is purely cross examination for the purpose of showing the weight that is to be given the testimony of the witness. I think if your Honor will let me go a little farther you will see what I mean.

Mr. Jaspert: It seems to me that Mr. Brown is bringing in a phase here of discrediting a witness.

The Court: Mr. Brown has asked the Court's indulg-
[fol. 126] ence on this examination solely for the purpose of attacking credibility. I think he is entitled to that.

Mr. Brown:

Q. I show you what appears to be a photostatic copy of your employment contract with the Westinghouse Company and ask you to examine that and state whether or not that is a copy of a contract bearing your signature?

A. That is my signature.

Q. And that contract provides, does it not, "that the employee will perform for the company such duties as may be designated by the company from time to time, and will assign to the company all inventions made by him while in its employ, that shall be within the custody or contemplated scope of the company's business". Is that correct?

A. I trust you have been reading that, and that sounds like the fact. I think that is correct.

Q. I don't want any doubt about it. Will you read it?

A. I will read it, yes sir. Yes sir.

Q. Your application for your tin alloy, tin copper phosphorous solder, was prepared by Mr. Webster?

A. That's right?

Q. Who is a patent attorney employed by the Aluminum Company?

A. At that time.

Q. And it took, I assume, a few days to prepare that
[fol. 127] application and get it in proper shape after you made your disclosure to Mr. Webster?

A. I don't know how long it took Mr. Webster to do his work.

Q. Well, won't you agree that it certainly took him a few days to get this in shape to draw the claim?

A. It would take me a few days.

Q. And your application was filed as appears upon the patent itself, defendant's Exhibit N, on June 10th, 1936?

A. That is my recollection.

Q. I would like to read you a paraggraph from the patent commencing at line 18 of page 2, as follows: "I have successfully used alloys described herein above for welding and brazing ferrous and non-ferrous parts by both the electric arc and the gas flame methods, for joining brass, bronze and copper tubes and sheets, and for the repair and filling of

cast objects, both copper base and iron base. However, due to the unique properties of these alloys, they are adapted to many uses, and it is not my intention to limit their application to any particular form or to any particular purpose." Had you done all of that work that you say there in testing these in all the different ways, between May 31st and a few days before June the 10th?

A. I did part of it myself and had some of it done.

Q. Some of it had been done before you left the Westinghouse Company?

[fol. 128] A. I said I had some of it done by others.

Q. Was it all done in that period of less than ten days between May 31st and June 10th, because your application was received in Washington on the 10th and was executed at least a day or two before that?

A. I am not prepared to say whether it was all done between that time.

Q. If it was not done in that time, either you misstated in your patent to what you had done or else you had done part of this while you were still an employee of the Westinghouse Company. Is that right?

A. That would be an obvious conclusion.

Q. In either case, you would have made a misstatement, would you not?

A. I don't know that I would have made a misstatement in either case.

Q. Well, either a misstatement, or you would have made an invention that should have been assigned to the Westinghouse Company?

A. I am not prepared to answer on that.

Q. All right. We will leave that for argument. What is the composition of your silver tin phosphorous alloy as made under your patent, defendant's Exhibit M?

A. Defendant's Exhibit M is not the silver tin phosphorous. It is the copper phosphorous tin alloy.

Q. I mean to ask you as to Exhibit M, which is the tin.

[fol. 129] The Court: You included silver in your question.

Mr. Brown: I am sorry, your Honor.

Mr. Brown:

Q. What is the analysis of that alloy as you sell it to the trade, Mr. MacGregor?

A. Very close to seven and a half percent of phosphorous and two percent of silver.

Q. The tin I am talking about.

A. I am sorry. The tin alloy is approximately seven and one quarter percent of phosphorous, approximately one-half of one percent of tin and the balance copper. Those are the ingredients.

Q. And that has been sold to the trade under the name of "MacGregor's 1300"?

A. Alloy 1300, I call it.

Q. And it is known in the trade by that name?

A. That's right.

Q. And has it always been made of that composition?

A. Yes sir.

Q. As a matter of fact, you have to take great pains to keep it as nearly as possible to the exact composition, do you not?

A. Those are always pains to manufacture. You endeavor to maintain uniformity.

Q. The standard manufacturing requirement of this kind of thing is to maintain the standardized constituents of it?

A. You take pains to do that.

[fol. 130] Q. That is also true of your phosphorous copper silver alloy as made under your patent, Exhibit N?

A. That's right.

Q. What are the constitutents of that alloy as you have made it and sold it to the trade?

A. In that alloy we strive for seven and one-half percent phosphorous, two percent silver and the balance copper.

Q. And that also has been maintained as nearly as possible exact in all of the products that you have sold?

A. That is the endeavor.

Q. I believe that is sold under the trade name of "MacGregor's 1270"?

A. Alloy No. 1270. Those numbers, if I might make a comment there,——

Q. Surely.

A. Those numbers were adopted as convenient names of identification and referring to their approximate melting points in degrees Fahrenheit.

The Court:

Q. You mean that 1300 would be the Fahrenheit melting point of your tin alloy?

A. That's right.

Q. And 1270 would be the Fahrenheit melting point of your silver alloy?

A. That's right.

Q. The Centigrade melting point would be less?

A. Yes.

[fol. 131] Mr. Brown:

Q. Will you just, for the convenience of the Court, translate 1300 Fahrenheit into Centigrade and 1270 Fahrenheit into Centigrade? You devide it by one and four-fifths, do you not?

A. 1300 converted into Centigrade is 704 degrees plus Centigrade.

Q. What about 1270 degrees Fahrenheit?

A. I think that is approximately 688. Is that correct?

Q. Is that the temperature that you have given the point at which melting begins?

A. I think I stated those numbers were used as the identification and also indicated the approximate melting point. The point at which melting begins may in some instances be lower than those figures.

Q. I am not asking you what may be. I am asking you what is. What does the 704 and 688 refer to as you understand it?

A. If Mr. Brown will permit me, I have in my brief case some curves on which I have endeavored to determine the melting point of this 1270 alloy.

Q. Do you want to examine them?

A. I would like to see them. I don't recall the exact figures.

(Recess.)

[fol. 132] ALPINE R. MACGREGOR resumes the stand and testified further as follows:

Mr. Brown:

Q. Mr. MacGregor, you have obtained the curves from your brief case. Do you wish to add anything to your answer?

A. I have them here, Mr. Brown.

Q. Would you please tell us the temperature at which your copper phosphorous tin solder, as made under your patent, defendant's Exhibit M, is at proper temperature for soldering?

A. Is at proper temperature for soldering?

Q. As in actual use.

A. I can not answer that question. I don't know what is proper temperature for soldering.

Q. You don't know. At what temperature—to what temperature must it be raised if you know, in order to use it for soldering?

A. The copper phosphorous tin alloy, that question is a question which I can only offer some observations, Mr. Brown.

Q. Don't you know the answer?

A. As stated, I am afraid I don't know the answer. As I understood it to be stated.

Q. These solders commence to melt at a certain temperature?

A. That is an entirely different thing from what the operating temperature is.

Q. But they do not become fluid and suitable for use as [fol. 133] solders at the point at which they commence to melt. Is that correct?

A. They will not become—I want to be sure I have that.

(Question read.)

Q. I mean suitable for use in soldering.

A. I think, again striving for accuracy, that the melting point of a solder in any instance is one thing. Generally, in its application, any man soldering with a material will invariably use, actually use some temperature in excess of its melting point. I hardly conceive that the melting point itself would be—could be construed or should be construed

as the temperature necessary for soldering. I think those are two different things.

Q. I am informed, and see if it agrees with you, that these solders of the kind we are talking about, commence to melt at a certain temperature but that they become fluid so that they may be used for soldering, at a temperature that may be 100 degrees or more higher than on the Centigrade scale. Is that right?

A. I think that is right. I simply want to be clear as to whether we are talking about melting points or whether we are talking about some other temperature above that melting point.

Q. Now, when you said that your solder melted at 704 degrees Centigrade, just to what did you refer in making that statement? What point in the range of melting temperature is used in actual operation?

[fol. 134] A. I would not like to be confined to anything beyond identifying that number as an approximate measure of its melting point. I don't mean to say that is either the lowest point of which any of these constituents melt, nor do I mean to say that is the operation temperature at which the welder or solderer uses it. I simply use it as an identifier of an approximate melting point.

The Court:

Q. But isn't the melting point of an alloy, an absolute?

A. If we define what is the melting point, it is an absolute. I am not sure that I know what is the melting point but if it is the lowest point in the curve of the cooling curve, that is one thing. If it is an intermediate point that is something else. If it is the highest point. In any cooling curve there are periods of arrest. Which one is the melting point I will not presume to say. I am not an expert. I have some curves.

Mr. Brown:

Q. As I understand your testimony then, you do not set up these two temperatures of 704 degrees Centigrade and 688 degrees Centigrade, which you have stated were the melting points, or which has reference to the melting points, of your two solders, as meaning anything critical or particular with respect to these solders?

A. Subject to variations.

Q. And you don't set them up as meaning any particular definite thing. Is that right?

[fol. 135] A. They mean approximately something and they represent a relative difference between each other. Whether that is—may I answer it this way, Mr. Brown. Whether the figure is 1300 or 1304 *or 1304* or 1310 or 1290 or 1280, I would not want to pose as being absolute on that matter. Similarly, whether the thing I call 1270 is 1190 or 1200 or 1270, I would not want to pose as setting it absolutely at that, but the figures 1300 and 1270 represent a difference of some magnitude between the melting characteristics of the two alloys.

Q. Even so, but just what characteristics do they represent? Do they represent the point at which it begins to melt or the point at which it is fluid or the point at which it is used for soldering in practical operation, or if not any of those, what do they represent?

A. May I answer that by submitting some curves?

Q. Can't you answer that from your own knowledge?

A. May I answer it from a curve?

Q. Yes.

A. I have here one curve of some—of a test made on the silver alloy containing 2.15 percent silver in this particular instance. I think the phosphorous there was assumed to be in the neighborhood of seven and a half percent.

Q. Remember, you are answering a very simple question and I don't care for you to go into the technical description of the curve. You may see the curve or any data you have [fol. 136] to answer the question. I am not trying to heckle you. I am just trying to help you to answer the question.

(Question read.)

You are talking about two specific temperatures, one for each of your two alloys. Take them one at a time.

A. The No. 1270 in this particular test is a figure that is slightly below each period of arrest that occurs on this curve, which is evidently about 1275. After that there is another period of arrest in this curve which is at about 1260. Another one occurring possibly at 1255. An indication of still another one which became apparent on running a heating curve, superimposed on the cooling curve, as indicated on the cooling curve and confirmed in the heating curve, another period of arrest at approximately 1189, so that

in these I have marked down a figure of 1264 as representing an average over a section of the curve where there is a pronounced change in its slope.

Mr. Brown: Your answer may mean something to the Court but it means nothing to me and I move to strike it out.

Motion granted.
Exception noted.

Mr. Jaspert: I object to that because Mr. Brown here is still on credibility.
[fol. 137] Mr. Brown: No.
Mr. Jaspert: Then I object to it because it is a proper answer to the question.
The Court: The motion has been granted.

Exception noted.

Mr. Brown:

Q. It is a fact, is it not, that your two solders that are involved in this case, and the phos-copper solder of the Westinghouse Company are sold in active competition for use by the same people, for the same purpose, is it not?
A. It is sold in active competition with the Westinghouse material.
Q. And to the same customers?
A. To the same type of customer. Are you saying specifically the same customer?
Q. Frequently to the same customer?
A. Possibly the same customer. I am only striving to be truthful.
Q. You try to sell your two solders to people who are now using the Westinghouse phos-copper solder, do you not?
A. Certainly.
Q. And to substitute your material for the Westinghouse material, for the same uses, do you not?
A. That is commercially, general sales practice. You always try to get your material used.
[fol. 138] Q. Do you go out and offer your two solders to be used by persons who are now using the Westinghouse phos-copper, with the understanding that your solder will do the same thing that Westinghouse solders do? Westinghouse phos-copper solder under the Jones Patent, I am talking about.

A. I don't go out just for that purpose. I go out and try to find out if they are using a material—if they have any use for material such as I have to furnish. Whether they are using the Westinghouse material or whether they are using some other, is entirely incidental.

Q. Let us not quibble. Isn't it your position that each of the three solders, the Westinghouse phos-copper solder and your tin solder and your silver solder are interchangeable in use, in the practical art?

A. For some cases they are interchangeable. There may be cases where some factors, where some differences in characteristic, may be preferred by a user, and he may specify one or the other, and there have been cases where the Westinghouse material has been preferred to our material, and there have been other cases where ours has been preferred to Westinghouse.

Q. For the same use?

A. For the same general use.

Q. The same job, in fact?

A. For the same specific job.

Q. Now, what was the composition of the Westinghouse [fol. 139] phos-copper solder as it was made while you were at Westinghouse?

A. While I was there I think it was about seven per-cent phosphorous and the balance copper.

Q. When you went out you started immediately to making the phos-copper solder different from the Westinghouse solder with which you were familiar, only in that you added about one-half of one percent of tin. Is that right?

A. That is substantially right. Different in respect to that element of composition.

Q. That was the only difference, wasn't it, that you added one-half of one percent of tin?

A. Chemically, that was the difference.

Q. And your silver solder, the only difference between that and the Westinghouse phos-copper solder of the Jones Patent, is that you added approximately two percent silver, is it not?

A. There again that is the chemical difference.

Q. And your two solders have the same amount of copper and of phosphorous that the Westinghouse solder has, except that you replaced a small part of the copper with

a fraction of a percent of tin in the one case, and with two percent silver in the other case. Is that right?

A. That is done on the basis of percentages.

Q. Well, regardless of why you do it or what your result is, that is the fact, is it not?

A. Yes, that is the fact.

Q. Now, Mr. MacGregor, your answer to the statement of claim in this case denies that your copper phosphorous [fol. 140] tin solder was in issue in the suit, the infringement suit that was filed against you in the United States District Court under the Jones Patent. Do you care to explain that?

A. I am not sure I understand what you mean there, Mr. Brown.

Q. Well, in the statement of claim in this case, the plaintiff alleged that prior to the filing of the suit in the United States District Court for the Western District of Pennsylvania, MacGregor had made a brazing solder comprising copper, phosphorous and tin, and in your sworn answer to that complaint you said, "Defendant denies that solder comprising copper, phosphorous and tin was the subject matter involved in the said litigation". I want your explanation of that so that we won't misunderstand each other.

A. I am still confused. May I answer this way: I don't know what was in that complaint but this is certainly my recollection and I think this is positive, that I started making copper phosphorous tin alloy. That was the alloy I was making when that first—was that the infringement suit, the first suit?

Q. That's right.

A. I was making that alloy when that suit was made. After that, I made some other alloys but did not make any of the straight phosphorous copper alloy. Made none of the straight phosphorous copper alloy at any time prior to my being licensed.

Q. You are wandering around now. As I understood [fol. 141] your testimony yesterday, you stated that the first solder you made was your copper phosphorous tin solder which is covered by your patent Exhibit M?

A. That's right.

Q. As I understood it, you have made that continuously and are still making it?

A. That's right.

Q. And you have not changed it in any way at any time. Is that right?

A. That is substantially right.

Q. What did you mean by saying that that solder was not an issue in the infringement case that was filed under the patent in the United States District Court?

Mr. Jaspert: I would like to interrupt there. Mr. Brown did not point out that the complaint charges that at the time of the infringement suit MacGregor was making a brazing solder comprising only copper and phosphorous. Mr. MacGregor testified here yesterday that he was not making such a solder. He was making only the copper phosphorous and tin, and this answer was his denial to the statement of copper and phosphorous only. I do agree with Mr. Brown that it says tin, but obviously the intention was there to deny the allegation that he was making the copper phosphorous alloy.

[fol. 142] The Court: I think you will have to read it as it appears.

Mr. Jaspert: Then I object to his question as it was asked. In other words, he took part of the paragraph of the complaint and part of the paragraph of the answer and tries to piece them together and make out that there is an improper sworn answer.

Mr. Brown: I am not trying to make out anything. I am trying to find out what the witness may know. In this Court under oath and in the United States Court, are two entirely inconsistent statements.

Mr. Jaspert: We will admit that.

The Court: Go ahead.

Mr. Brown: As a matter of fact, Mr. Jaspert, the only thing as I understand Mr. MacGregor's testimony at this time, involved in the patent suit in the United States District Court, was whether or not MacGregor's phosphorous copper tin alloy as made under his patent Exhibit M, was the infringement of the Jones Patent. Is that right?

Mr. Jaspert: Yes, but the complaint charged him also [fol. 143] with infringement of making the Jones alloy at that time, which he was not making.

Mr. Brown:

Q. You said yesterday you were served with notice of infringement of patent. As a matter of fact, you were sued for an infringement of the Jones Patent by the West-

inghouse Company, were you not, and subpoena served upon you?

A. I am sorry if I used the wrong terms.

Q. I am asking you now. It doesn't matter. Correct it now if I am wrong. You were sued, were you not?

A. I received a paper serv[illegible] on me which I construed as meaning I was sued.

Q. And you went to Mr. Jaspert and retained him as your attorney to defend you in that suit?

A. Yes sir.

Q. And acted under his advice in connection with that suit?

A. Yes sir.

Q. And then you took a license in order to settle that suit, to avoid trying the suit?

A. I took a license in settlement of that suit. I will deny it if the question is that I did it to avoid anything.

Q. Anyhow, at that time you preferred to take a license under this patent rather than to try that infringement suit?

A. I ultimately concluded to do that.

Q. And did it?

A. And did it.

[fol. 144] Q. Now then, this question will be out of order ordinarily, but there has been an inference cast here, and you took that license entirely voluntarily and without any coercion or threat of any kind, did you not, other than the threat of litigation?

A. I would not mind stating all the factors in my mind——

Q. Just answer the question. Were you coerced in any way to take that license? Did you have to take it for any reason?

A. No, I didn't have to take it.

Q. You were confronted with going through with the patent infringement suit or taking the license?

A. That's right.

Q. You and your counsel decided to take the license, and you did take the license?

A. Yes sir.

Q. You still have that license in effect?

A. That's right.

Q. And you have made the phos-copper solder without any other ingredient, and paid a royalty on that under that license?

A. That's right.

Q. And if you made any tomorrow, you would pay a royalty under that license?

A. Yes sir.

Q. You regard the license as still in force and effect?

A. I regard the license as still in force and effect under [fol. 145] advice from Mr. Jaspert, as applying to the phos-copper alloy alone.

Q. In other words, you regard the license as still in force and effect as covering anything that properly comes under the Jones Patent, do you not?

A. That properly comes under the Jones Patent, yes sir.

Q. You don't regard it as rescinded in any way because of any illegality or improper use of it by the Westinghouse Company. In other words, you consider yourself at this time to be under the license agreement, and it is in full force and effect for what it properly covers. Is that right?

A. I am a party to that agreement as it stands.

Q. Now, Mr. MacGregor, yesterday on this question of fixing prices and re-sale prices. You went on under direction of counsel to say that there had been instances in which the Westinghouse Company as you understood it, had tried to get you to fix the re-sale prices of your distributors?

A. Yes sir.

Q. Now, was that before or after Mr. Savage's letter which has been put into evidence as plaintiff's Exhibit 4?

A. That was on October 23rd, 1940. Both before and after Mr. Savage's letter.

Q. Did Mr. Jaspert send you a copy or the original of Mr. Savage's letter, plaintiff's Exhibit 4?

A. I think Mr. Jaspert did give me a copy. Whether he did or not, I have at least seen the letter.

Q. Didn't you from that time on have in your possession [fol. 146] or know of a letter from the patent counsel of the Westinghouse Company telling you specifically that there was no intention on the part of Westinghouse, and had never been, to try to control re-sale prices?

A. I had a letter apparently telling me that.

Q. Didn't you regard that as full authority and justification on your part for refusing to be influenced in any way to do a thing which counsel for both parties said was illegal?

A. Just why am I reminded then from time to time——

Q. Don't ask me questions. Will you answer my question?

Mr. Jaspert: I think that is a proper answer under the circumstances.

The Court: The witness may answer the question and then make any explanation he wants.

(Question read.)

A. As is presented here, it may have been full authority for me to act according to that letter, but at the time I never considered it my authority to so act. I may have overlooked something there.

Q. Don't you remember at the conference which you refer to, I believe, as held within a day or two after the receipt of the letter which has been offered as plaintiff's Exhibit 3, Mr. Savage stating, in the presence of yourself and Mr. Seastone, that there had been no intention to fix [fol. 147] re-sale prices and that you were under no obligation whatever to fix re-sale prices?

A. Where was this statement made?

Q. A conference, I believe, at the Westinghouse patent department where you were, shortly after receipt of that letter from Mr. Seastone on July 11th, 1940, defendant's Exhibit 1?

A. I am again not trying to quibble. I do not recall Mr. Savage saying that at any time in any conference. I recall that Mr. Savage read it.

Q. If you don't remember just answer. Did your counsel ever tell you that the Westinghouse Company, through its patent counsel, had stated to him that you were under no obligation to fix re-sale prices under this contract?

A. That letter which I saw from Mr. Savage amounts to an answer to that.

Q. Didn't Mr. Jaspert tell you before that, that he had been verbally so informed by Mr. Savage?

A. I am not certain whether Mr. Jaspert did tell me that or not verbally, Mr. Brown. He may have. I simply don't remember.

Q. How long has it been in fact since you have maintained the Westinghouse prices on any phosphorous copper tin or phosphorous copper silver solder that you have sold?

A. I maintained and still maintain the Westinghouse prices.

Q. On your phosphorous copper silver solder?

A. I have not finished my answer. I maintain it on the [fol. 148] copper phosphorous alloy alone. That is what we think of as the Westinghouse alloy. I maintain it on the copper phosphorous tin alloy. I do not maintain it or attempt to maintain it on the copper phosphorous silver alloy.

Q. You never have maintained it on that, I judge?

A. I have not attempted to.

Q. Now, it is a fact, isn't it, that before you took that license from the Westinghouse Company you were selling your copper phosphorous tin alloy for uses as solder, at prices five to ten percent less than the current prices of the Westinghouse Company, to your knowledge?

A. It was less.

Q. You sold even less than that?

A. I mean it was less than the Westinghouse prices. I may point out there that at that time I did not sell to customers. This five to ten percent to which you refer, is a figure which to my knowledge represents the selling price that my distributor used in selling to customers. What I sold to that distributor was another figure. Five to ten percent is the distributors.

Q. Are you referring to Corbett and Alfson?

A. Yes sir.

Q. As a matter of fact, they were your general agents, were they not?

A. I don't know what is an agent and what is a distributor.

[fol. 149] Q. Well, they helped to finance your business, didn't they?

A. Oh no.

Q. Were they the sole output through which you sold your solder for a while?

A. For quite some period that was the sole outlet.

Q. As a matter of fact, they put it out under their own name, without reference to you at first, didn't they?

A. As I recall it, they had out folders, I think they used the name 1300 Alloy, but the folders were out under their name, Corbett and Alfson. I may be wrong on that. I think that is so.

Q. Now, Mr. MacGregor, you say that you are still maintaining the Westinghouse prices on copper phosphorous and tin alloys. Why are you doing that?

A. Do you mean why have I not changed it?

Q. You are refusing to pay a royalty and you say it don't come under the patent. Why are you maintaining the prices?

A. There is no purpose as to why. I simply haven't gotten around to any question of price change. Every time a price change is made it sets up a terrible disturbance in the market.

Q. Then you intend sooner or later or at some time when you get around to it, to sell at some different prices?

A. I may.

Q. Have you ever made any accurate test or had any [fol. 150] testing bureau compare the melting point of your copper phosphorous tin solder and your copper phosphorous silver solder with the copper phosphorous solder put out by Westinghouse Company?

A. I have made such tests myself, Mr. Brown.

Q. Just in a general way tell me what your observation is as to the difference in the melting point of your solder as compared to the copper phosphorous solder as put out by Westinghouse Company? Take your tin solder first and then your silver solder, please.

A. I think is would satisfy you and I will be glad to say that insofar as the melting point is concerned, speaking of my tin solder, there is probably very little difference between the melting point of my tin alloy or let us say the operational temperature, and the Westinghouse material.

Q. That is, there would be very little difference in that, too. Is that right?

A. Well, there is quite a difference between the actual melting point and the temperature at which it is used in any case.

Q. Go ahead. As I understand you, you say that there is very little, if any, difference in the melting temperatures or the operating temperatures of the Westinghouse copper phosphorous solder as made commercially, and of your copper phosphorous tin solder as made commercially. Is that right?

A. The point I am attempting to make is, if we are taking the operating temperature, then there is probably no prac- [fol. 151] tical difference. If we are taking the melting temperature, there again there is little difference, although there may be some difference recognizable by either the

metallurgist or the operator. Maybe a difference of small magnitude, but a difference.

Q. Make the same comparison of your observation as to the copper phosphorous solder of Westinghouse and your copper phosphorous silver solder.

A. In respect to operating temperature again also there may or may not be any difference. I don't know that actual operating temperatures in any case have ever been determined by anybody as applying to their solders. Certainly I doubt if they have ever observed any specific operating temperature by any welder so that we can say of the practical operating temperature that there is no difference, because no welder attempts to observe any specific operating temperature. If you are talking about differences in this case now of the silver alloy compared to the Jones alloy, in melting point characteristics as revealed on a cooling curve, then there are differences and distinct differences in the two characteristics of the two alloys.

Q. As I understand you, you say that the operator using the solders probably would see no difference. Is that right?

A. I didn't mean to say he would see no difference, Mr. Brown.

Q. Well, observe no difference?

[fol. 152] A. Nor observe. I simply meant to say he might not use any difference.

Q. He may use them at the same temperature?

A. He may use them all at the same temperature. When you have an acetylene torch in your hand, playing it on metal, you don't stand there with a thermocouple in one hand and a torch in the other.

Q. From any point of view, what difference have you, by any accurate measurement, determined as to the melting point of the Jones solder and your copper phosphorous silver solder?

A. I have attempted to determine those characteristics with the aid of what I think is the conventional method for such determination, by a potentiometer, and a suitable thermocouple, taking the cooling curve or the heating curve of the metal under consideration. Under such a test I have found a difference, a decided and marked difference in the results of such tests between the two alloys.

Q. Is that all you care to say about that?

A. I think that answers the question.

Q. Do you regard solder as the same thing as welding?

A. What is that?

Q. Do you regard the operation of soldering as the same thing as welding?

A. Many solderers and welders, they may regard——

Q. I ask you what you regard about it.

A. I regard there may be a difference.

Q. You regard them as different processes?

[fol. 153] A. With the further qualifying statement that what I regard it to be does not establish it.

Q. You need not tell us that. Mr. MacGregor, I would like for you to look at the Canzler patent, defendant's Exhibit C, and tell me what you understand to be the teaching of that patent as to the amount of phosphorous contained in the alloy referred to and described by the patent?

A. The teaching of that patent simply refers to the necessary amount of phosphorous.

Q. For what, welding or soldering?

A. For welding. The man is talking about welding here.

Q. And what, according to your knowledge, as of 1914, was the necessary amount of phosphorous in an alloy of that kind, for use in welding?

A. To my knowledge as of 1914?

Q. Yes.

A. I don't know.

Q. What is your proposition as to what that patent taught as to the amount of phosphorous in the particular alloy that it was describing?

A. My conception of what it taught?

Q. Exactly.

A. I feel convinced, and I may be wrong, that this patent teaches the amount of phosphorous which he used, whether it has been for welding or whether it has been for soldering, or what it might have been for, for the joining of copper parts or nickle parts, may have and I think probably did approach a phosphorous content up in the range approxi- [fol. 154] mating ten percent phosphorous. That is my opinion of what that meant.

Q. Has that always been your opinion of what that meant?

A. It has been my opinion of what that meant since I have read this patent.

Q. When did you first read that patent?

A. I don't remember. It was since these issues have come out.

Q. Mr. MacGregor, when you applied for your patent on the copper phosphorous and silver, the Patent Office rejected your application stating that the Canzler patent anticipated your idea. You remember that, do you?

A. I do not remember it, and I would like to say that Mr. Webster prosecuted that patent and he has all the papers that transpired, and Mr. Webster died a year ago and his wife evidently still has those papers and I don't know whether there was an actual rejection in the prosecution of it or not.

Mr. Jaspert: May I interject. The witness here is not bound by the statements of his attorney in the patent office, in the prosecution of the application insofar as the attorney's statements are concerned. He is bound by the acts of his attorney in cancelling claims, and so forth.

The Court: That is what the question is directed to, whether or not claims were not rejected because they came [fol. 155] within the scope of the Canzler patent. He is the inventor.

Mr. Brown: The attorney in the prosecution of the patent application is an attorney in fact, not an attorney at law.

Mr. Brown:

Q. Mr. MacGregor, in response to the Patent Office letter in which they rejected your application on Canzler, you are shown by this certified copy of the file history of your application to have made this statement: "The Canzler et al. Patent 1,103,482, on which the Examiner relies particularly, is admittedly more pertinent than the other references. However, it fails to anticipate the present invention. It does not ~~disclose~~ applicant's phosphorous content, merely calling for "the amount necessary for the welding operation," and so far as now known, the amount of phosphorous considered necessary at the time of the Canzler application was quite small, on the order of one per cent." That is what your attorney said in order to get your copper phosphorous silver alloy patent allowed. Do you wish to repudiate that statement now?

A. I don't.

Q. Or explain it?

A. I don't wish to repudiate or quibble. I may have been a party to that statement that my attorney made and I may have concurred in it at the time he made it and have been under that impression that Canzler meant one percent or [fol. 156] thereabouts. However, my present impression of what Canzler meant, but I don't know just specifically when I came to that impression, is that Canzler might quite reasonably have meant a phosphorous content considerably in excess of that one percent and possibly approaching as much as ten percent.

Q. Have you any practical experience that shows you or gives you a basis for stating what amount of phosphorous was used with copper, where the phosphorous was to function as a de-oxidizer for a welding operation. If the answer is no, I wish you would say so and stop. If you don't know, say so.

A. It seems to me there are two questions there and I don't know how to answer them both at the same time.

Q. If you don't know say so.

A. As I understood your question, I don't know the answer.

Q. In this same file history you said that Canzler did not disclose silver in a way that met your invention, your statement being this: "The patent also fails to disclose the applicant's silver content—one to three percent, and specifically two percent—and makes all amounts of silver up to five percent equivalent." In other words you distinguish from Canzler by simply putting in or restricting this to a specified amount of silver, did you not?

A. As I remember, Canzler referred to any amount of silver up to five percent, and at the time I was conducting [fol. 157] those tests I had reason to believe that from two to three percent was preferable to ranges below and above that, still within Canzler's qualifications of up to five.

Q. In other words, the net result of it was that you told the Patent Office, successfully, that the Canzler patent did not disclose the subject matter covered by your application for the patent that has been issued to you as defendant's Exhibit N. Is that right?

A. I don't know whether I told the Patent Office that or not.

Q. Don't you understand the language I have read to you, to have that effect and to be intended to have that effect?

A. It ultimately results in that in the final analysis, yes.

Q. And didn't you also tell the Patent Office that the Canzler Patent was incorrect in its teaching of certain other things like bismuth, and so forth, that could be used as the equivalent of silver?

A. I don't recall that I did tell the Patent Office that. Maybe I did. I can't see that bismuth would have the same effect as silver.

Q. In other words, it would not be the effect if Canzler would say that he was wrong or misleading in his teaching?

A. That is my present impression. I don't know what my attorney might have said, if he differed with that.

Q. Don't you know what your attorney said? Didn't he [fol. 158] send you copies and consult with you in making your application for a patent in the art with which you were making your living?

A. We had several conferences, Mr. Brown, during that time. Mr. Webster was in Washington, and I am relying entirely—I don't have the file wrapper history of my own 1270. Mr. Webster still has all these.

Q. Didn't you confer with Mr. Webster and didn't you consult with him as to what he said to the Patent Office about your case?

A. Yes.

Q. Didn't you know the argument that he was making to the Patent Office in order to get your patent?

A. I think I did, but I would not want to be certain I did in all instances.

Q. Mr. MacGregor, if I were to suggest to you that your copper phosphorous tin alloy starts to melt at approximately 705 degrees Centigrade and only becomes entirely liquid at approximately 822 Centigrade, would you be disposed to question the accuracy of that statement? Have you anything in your experience that would negative the correctness of that figure?

A. It begins to melt at 705, did you say?

Q. Commences to melt at about 705 and becomes entirely liquid at 822 Centigrade.

A. I would be disposed to question that but I am not—I don't doubt that you may have such results.

Q. You don't know anything that would show you that [fol. 159] that statement would be incorrect, do you, from your experience and your tests and observation?

A. I know I have made tests of what my alloys show, beginning to melt at a point considerably under 705, of which you speak.

Q. Now, Mr. MacGregor, if you took your copper phosphorous tin alloy and took out the tin, leaving the other constituents, would you have left a good workable solder?

A. Certainly.

Q. If you took out the phosphorous and left in the copper and tin would you have left a good workable solder?

A. One-half of one percent tin and ninety-nine and one-half percent copper? Is that what you mean?

Q. If you took out simply the phosphorous and left the two other ingredients as they are in your product, would you have left a solder, useful for the purposes that solders are used for?

A. I believe that would not be a solder.

Q. I will ask you the same question, if you retain your tin and phosphorous and took out the copper, would you have a workable, useful solder?

A. If I retained the tin and took out the copper?

Q. Just left the phosphorous and tin, just the phosphorous and tin that you actually use in that material?

[fol. 160] A. That upsets the percentages considerably. What is going to replace the——

Q. Suppose you have left seven and one-half parts of phosphorous and one-half of one part tin and put those two together, would they make a solder?

A. Tin and phosphorous together without copper, seven parts of——

Q. You said seven to seven and a half parts phosphorous and one-half of one percent tin. Take the copper out and take what is left, does that make a solder?

A. If you have remaining something on the order of seven parts phosphorous and only one-half part tin, making a total of seven and one-half parts, I can hardly conceive of that as a solder. That is getting very hypothetical.

Q. Don't you know it would not be any use then as solder?

A. I think it would not.

Q. Isn't the same thing true as to your copper phosphorous silver, if you would take the silver out, the remainder would be a good solder, but you could not take out either the phosphorous or copper and have a residue that would be of any value as a solder?

A. All right.
Q. The answer is yes?
A. All right.

Noon Recess

[fol. 161] Afternoon Session

ALPINE MACGREGOR, the defendant, resumes the stand and testifies further as follows:

Mr. Brown:

Q. Mr. MacGregor, in response to Mr. Jaspert's questions you gave the percentage of phosphorous that was contained in the Maxon patent, defendant's Exhibit D. Will you now tell us the percentage of copper that is disclosed in that Maxon Patent?

A. Four parts in sixty.

Q. Will you compute the percentage?

A. That is 6.6 percent.

Q. In other words, the copper is a minor constituent of that alloy insofar as quantity is concerned?

A. In respect to the total, yes.

Q. What is the comparative proportion of copper and phosphorous with relation to each other? The relation is four and three, is it not, four parts copper and three parts phosphorous?

A. That's right. Four parts copper and silver three parts, phosphorous three parts, which is a relationship of four to three.

Q. Did you ever know of any solder being made and used in your experience, conforming to this Maxon Patent

The Court: Made exclusively of copper and phosphorous?

[fol. 162] Mr. Brown: Made according to the entire teaching of the Maxon Patent as this witness understands it.

A. I have not come in actual contact with those exact proportions, aside from the teaching here. That is all.

Mr. Brown:

Q. Would that in general—would a solder containing all of those ingredients and that small proportion of copper, be classed as a soft solder?

A. I should say yes.

Q. Soft solders are used for different purposes and different classes of purposes in actual industrial operations, from the solders of a class that are covered by your two patents and the Jones Patent?

A. Yes. They are generally referred to as hard solders.

Q. They are not interchangeable in the art and used for the same purpose in industry?

A. I would not say they are interchangeable or for the same purpose.

Q. Would you say they are not generally used for the same purpose?

A. That's right.

Q. And they are recognized as different classes of materials?

A. That's right.

Q. Referring to the Canzler Patent, however, in your experience, observing the use of any solder made according [fol. 163] to your understanding of the disclosure of the Canzler Patent, that is defendant's Exhibit C?

A. Did we call the Canzler Patent a solder or was that a welder?

Q. Suppose you look at the patent and call it what you please.

A. It says "Alloy for welding copper and nickle."

(Question read.)

A. Regardless of whether we call it a solder or a welding material, I would even be so bold as to think that the Jones alloy complied with the teaching of the Canzler Patent.

Q. Is the nearest thing you have run into in your observation and experience, the nearest solder you have run into, to the disclosure of the Canzler Patent, the Jones phos-copper solder?

A. Canzler teaches two things——

Q. Wait a minute. Can't you answer my question?

A. I think that question can not be answered just so simple. Canzler teaches two things. At least two things. He teaches that hitherto in welding, copper and phosphorous are generally used, but he found that by the addition of silver in certain proportions, certain improved results were obtained in his opinion, so that when you refer to his reference to prior knowledge, we have reason to believe

he was speaking of copper and phosphorous. When we refer to his reference to what he found as an improvement, we have reason to think he was speaking of copper phos- [fol. 164] phorous and silver, and in that respect I think I directly answer your question, that the similarity becomes one close to my silver alloy.

Q. Have you ever known any solder or run across any solder in your practical experience which you understand to be made in accordance with the teachings of the Canzler Patent, and if so state what it was and where you encountered it.

A. Will say two of them, the Westinghouse material and the MacGregor material under the MacGregor Patent for the silver alloy.

Q. They are the only two you have in mind?

A. Right at the moment, yes.

Q. Now, do you regard your copper phosphorous silver patent as being made in accordance with the teachings of the Canzler Patent?

A. Yes, with the additional contribution I think in my case that I found within Canzler's range, certain preferred limits, preferred to the purpose that I was seeking at the time.

Q. And you thought that difference between your solder and the Canzler was a patentable difference, did you not?

A. I applied for it as such, and it ultimately issued.

Q. You took out a patent and you are asserting the patent and holding onto it and setting it out as a valid patent, are you not, and have so pleaded in this case?

A. I regard it as a valid patent. That is only my opinion.

[fol. 165] Q. Mr. MacGregor, I show you certain pages of what appears to be a hand-written letter dated 8-24-33, and ask you if that is written in your handwriting and signed by you?

A. That's right.

Q. That is in your handwriting and you wrote it. Did you write it, sign it and send it on about the date it bears?

A. Apparently, yes.

Q. Will you look at it to make sure?

A. I am not questioning it. It is my handwriting.

Q. Do you remember writing the letter?

A. I believe I do remember writing the letter. I am not going to deny anything I have stated in this letter.

Q. Do you remember what you said in the letter?

A. No, I could not remember exactly but I remember I made some, what appeared to be some rather strong statements, which were made for a purpose.

Mr. Jaspert: I object to this going into the record until I have read it and Mr. MacGregor has read it.

The Court: Let him read it himself.

Mr. Jaspert: I have no objection to the letter going into evidence but I don't see any point in filling the record [fol. 166] with the reading of a four page letter, your Honor. The letter speaks for itself.

Mr. Brown: I would like the Court to know at this time what is in the letter. Of course we can offer it and it will be in the record, but I think in the trial of a case the Court wants to know, and there may be further cross-examination on it.

The Court: Can you summarize it?

Mr. Brown: Yes, your Honor.

Mr. Brown:

Q. Mr. MacGregor, you wrote that letter to another department of the Westinghouse Company protesting against their use of a silver phosphorous copper solder in the Westinghouse operations, didn't you?

A. A material known as Sil-Phos.

Q. And you protested to the other department of the Westinghouse Company that that material was no better than the Jones Phos-copper solder but that silver was added to it merely as a camouflage for the purpose of avoiding a charge of infringement of the Jones Patent, did you not?

A. Yes.

Q. That was your opinion at that time as to the purpose of the addition of the silver to the phos-copper solder, was it not?

A. Yes. That is my reply to Westinghouse.

[fol. 167] Mr. Brown: I should like to offer into evidence the original letter which has been identified by the witness as plaintiff's Exhibit No. 5, and I ask that it be so marked.

I should like to offer in evidence as plaintiff's Exhibit 6, a certified copy of the file history of the MacGregor patent No. 2,162,627, which is his silver phosphorous copper alloy, showing the statements that he made to the Patent

Office distinguishing from the art and stating in effect that his alloy was materially different from that shown in the Canzler Patent and others. I offer this as plaintiff's Exhibit No. 6.

Mr. Jaspert:

Q. Mr. MacGregor, reading from the employment contract with Westinghouse of August 14th, 1922, it says that "for and in consideration of the covenants herein recited, and of the salary agreed to be paid by the Company and accepted by the employee, it is agreed as follows"; did you at all times prior to 1936, or the date that you left the employment of the Company, receive a salary from the Company?

A. I received payments of salary, yes.

Q. Were you always employed by the Company, preceding your leaving there in 1936?

A. I was employed with the exception of furlough days.

Q. What are furlough days?

[fol. 168] A. Those were days that all of us had to take during the depression period when expenses were being reduced, and we were laid off for certain days.

Q. When you were laid off were you paid for the time that you were off?

A. Oh, no. That was the object of the layoff.

Q. About what time prior to 1936 did these layoffs occur?

A. They occurred, I think, possibly from 1931, maybe through 1933. I am not certain.

Q. How did you employ your time when you were laid off?

A. At various things. Some of them——

Mr. Brown: I object to this as utterly immaterial.

Objection sustained.

Exception noted.

Mr. Jaspert:

Q. When did you develop the copper phosphorous tin alloy of your patent, Exhibit M?

Mr. Brown: I think that is immaterial, but probably my cross-examination laid it open, and I have no objection.

A. I did considerable work on such alloys during those periods when I was unemployed or at least not working.

Mr. Jaspert:

Q. Did you do any of that work on the Company's time?

A. I did not.

[fol. 169] Q. Did you conduct any experiments with the materials that you created during these spare times? Experimental work?

A. Oh, yes.

Q. The portion of that disclosure that Mr. Brown read from your patent this morning, Exhibit M, as to your having discovered that the copper phosphorous tin alloy was suitable for welding and soldering, was that some of the experimental work that you refer to?

A. That's right.

Q. Mr. MacGregor, would a copper phosphorous alloy without any other component, of 80 percent copper and 20 percent phosphorous, be suitable for soldering?

Mr. Brown: This witness disclaimed being an expert.

Mr. Jaspert: The witness was asked whether at least a dozen different allows were suitable for soldering, with or without other ingredients than copper and phosphorous.

The Court: No, he was not. He was specifically asked in regard to the three alloys that are here in question. Then his own two alloys were taken. Certain things were dropped out of them. Tin was dropped out and silver was dropped out. He was asked as to the effect of that. Then he was asked as to the effect, whether solder would be satisfactory if you dropped out the phosphorous or the [fol. 170] copper, retaining the other elements in the same proportion. Those questions were solely directed to the patents that are here considered.

Mr. Brown: And which he had discussed in his direct examination.

Mr. Jaspert: That is what this is directed to, your Honor.

The Court: But you will have to relate it to that.

Mr. Brown: I object to the question as being purely an expert question, and the witness having expressly disclaimed any pretense of being an expert in this art.

Objection sustained.

Exception noted.

Mr. Jaspert: Your Honor, I did not object to Mr. Brown cross-examining this witness up and down and sideways because he was building up the case for me. Now, I am

trying to show the significance of Mr. MacGregor's answers this morning and I move that all of Mr. Brown's cross-examination be stricken out unless I am permitted to qualify Mr. MacGregor's answers.

The Court: This is the first time as Judge that I have been confronted with a pistol in the matter of cross-ex-
[fol. 171] amination. Certainly we will refuse your motion.

Exception noted to defendant.

The Court: You are asking this Court to strike out testimony that went in first without objection and second, testimony that the Court considered relevant, merely because the Court now refuses to permit you to a*k*s a question which you say is relevant and which the Court does not consider relevant.

Mr. Jaspert: Your Honor, would any question pertaining to the alloys defined by the Jones Patent be less pertinent than any questions concerning alloys defined by the MacGregor Patent?

The Court: No, not at all.

Mr. Jaspert: The Jones Patent shows an alloy comprising copper and phosphorous, in which the copper is in excess—is more than four to one in the ratio to the phosphorous. Now, 80 to 20 is four to one. May I ask the witness what would be within the range of four to one of copper and phosphorous?

Mr. Brown: I object to that as immaterial.

Objection sustained.

Exception noted to defendant.

[fol. 172] Mr. Jaspert:

Q. Mr. MacGregor, would a phosphorous copper alloy having a ten percent phosphorous content be a suitable soldering material?

Mr. Brown: I fail to see how that is proper re-direct examination or fail to see how it is pertinent to the issues of the case, Mr. Jaspert.

Mr. Jaspert: I didn't see the pertinence of anything you asked about the MacGregor Patent.

Mr. Brown: I object to the question as irrelevant and immaterial, as an expert question addressed to a witness who disclaimed being an expert, and therefore calling merely for a conclusion or opinion.

Objection sustained.

Exception noted.

Mr. Jaspert:

Q. Is there any alloys specifically described in the Jones Patent, that is suitable for soldering?

Mr. Brown: I object to that question.

The Court: Objection sustained. Your own witness has said that it is a good solder.

Exception noted.

Mr. Jaspert: Your Honor, Mr. Brown specifically asked the witness who now he asserts didn't know what he was [fol. 173] talking about whether certain percentages of tin and certain percentages of silver, coupled with certain percentages of phosphorous and a certain amount of copper, were good solders.

Mr. Brown: My examination was directed to determine what the main and essential ingredients of the three particular solders that are before the Court, and I asked the witness what would be the effectiveness or the residue if you took out first one ingredient and then another ingredient. My objection was to show that the main and essential ingredients were copper and phosphorous, and that is the only purpose of it and the only effect of it, and so far as I know was the only testimony he gave. I asked him no hypothetical question.

Mr. Jaspert: Didn't you ask whether they were suitable as soldering materials?

The Court: Just a moment. Ask the witness the question.

Mr. Jaspert: Do I take it that the Court has ruled that I may not inquire of this witness whether any other solders disclosed by the Jones Patent have any different characteristics than any other solders disclosed by that patent? [fol. 174] The Court: First of all, that question is not an intelligent question, in the judgment of the Court. The Court's answer to that is that it would rule on each question as it is presented. It has ruled and has noted an exception. I can't say what I am going to rule in the future until I hear the questions.

Mr. Jaspert:

Q. Mr. MacGregor, is a copper phosphorous soldier having 99 percent copper and one percent phosphorous a suitable solder?

Mr. Brown: Objected to.

Objection sustained.
Exception noted.

Q. Mr. MacGregor, are both a solder having 80 percent copper and 20 percent phosphorous and a solder having 99 percent copper and one percent phosphorous, within the ratio of four to one, of copper and phosphorous?

Mr. Brown: Objected to as immaterial.

Objection sustained.
Exception noted.

Q. Mr. MacGregor, could you competitively sell a solder, of which the ingredients were unknown, to the extent that you would have to market, that it has a melting range of between 700 and 900 degrees Centigrade?

[fol. 175] Mr. Brown: Objected to as irrelevant and immaterial.

Objection sustained.
Exception noted.

Q. Mr. MacGregor, you were asked this morning whether you had any knowledge of a welding alloy of copper and phosphorous and you answered no. Do you wish to correct that answer?

Mr. Brown: I don't remember any such testimony.

The Court: I don't either, but I think we had better let him answer that question.

Mr. Jaspert: With reference to the Canzler Patent, Mr. Brown asked the witness whether he knew of such a welding alloy of copper and phosphorous. The witness answered no, and I am asking now——

The Court: I don't recall any such question and any such answer. For that reason, I will permit you to ask it.

(Question read.)

A. I am wondering if I might be——

The Court: Please answer the question and don't wonder. You have a specific question here. Please answer it.

A. I would like to correct an answer I gave this morning.

[fol. 176] The Court: Answer this question.

Mr. Jaspert:

Q. Please answer this question.
A. I am sorry.

(Question read).

A. Yes.

Q. I hand you herewith copy of Patent No. 1,652,107, patented December 6th, 1927, that was granted to the Westinghouse on the same date as the Jones Patent, known as the Eschholz Patent, and ask you if you had knowledge of that welding alloy when Mr. Brown asked that question?

Mr. Brown: I object to that as immaterial. He is asking the witness if he was asked a question and if he wants to correct his answer. I suggest that he correct the answer. That gives no reason for dragging in something else.

Objection sustained.
Exception noted.

Mr. Jaspert: Mr. Brown this morning was interrogating this witness on the Canzler Patent and he asked him whether any such alloy——

The Court: All right. Let him correct the answer. We are giving the defendant every opportunity, and he will not answer the question. You may have him correct his answer to a previous statement, if he wishes to correct it.

[fol. 177] Mr. Jaspert:

Q. Mr. MacGregor, do you know of a copper phosphorous alloy that is now commercial, that has the characteristics of the alloy described in the Canzler Patent, for welding?

A. Yes.

Mr. Brown: I object to the question as irrelevant and immaterial and as being indefinite as stated. It asks for characteristics of the Canzler Patent, and I don't remember that the witness ever stated the characteristics of the Canz-

ler Patent. He was asked about the constituents and about the percentage of phosphorous.

Objection sustained.
Exception noted.

Mr. Jaspert:

Q. Mr. MacGregor, do you know of any commercial alloy of copper and phosphorous that is used for welding that has seven percent or thereabouts of phosphorous?

A. Yes.

Q. As you suggested this morning, that you had financial backing when you started your own business. Is that true?

Mr. Brown: I object to that as irrelevant and immaterial. He denied that. I asked him if Corbett and Alfson financed him and he said no.

Objection sustained.
Exception noted.

[fol. 178] Q. Did you investigate the Jones Patent at the time you accepted the Westinghouse license?

Mr. Brown: I object to that as immaterial.

Objection sustained.
Exception noted.

Q. Why did you take that license?

Mr. Brown: Objected to. He asked him that question before and it was ruled out.

Objection sustained.
Exception noted.

Q. Are there any other reasons than those you gave this morning of why you took this license from Westinghouse at the time you were sued?

A. One of the big reasons why I took the license was that I was not financially in position to face the suit.

JOHN B. SEASTONE, recalled by defendant, testifies further as follows:

Mr. Jaspert:

Q. In this distributor price list 26-826, defendant's Exhibit L, there appears the statement "This discount sheet is to be used only with duly authorized and appointed distributors who buy phos-copper brazing alloy only for resale purposes and who with respect to such alloy have signed an agreement in the form of 18349, sheets 1 and 2." What is the nature of that agreement?

[fol. 179] Mr. Brown: Objected to. When offered in connection with the price fixing proposition, I think it was understood that objection need not be repeated specifically. I repeat the objection generally, and in addition I object to this question because this Exhibit was put in by the defendant, and this witness was called by the defendant, and the Exhibit that he put in refers to some contract of some code number. It is improper to prove the contents of that contract by this witness. If this defendant wanted that contract in evidence he should have called on us to produce it. I certainly object to this witness saying even what some contract or form of paper of some kind may contain, merely by reference to a code number in defendant's Exhibit.

Objection sustained.
Exception noted.

Mr. Jaspert:

Q. Mr. Seastone, do you have any secret agreements not known to Mr. MacGregor, with your distributors?

Mr. Brown: I object to that.

Objection sustained.
Exception noted.

Mr. Jaspert:

Q. Have you ever furnished Mr. MacGregor with a copy of your distributor agreements?

[fol. 180] Mr. Brown: I object to the question as irrelevant and immaterial.

Objection sustained.
Exception noted.

Mr. Jaspert:

Q. Was Mr. MacGregor ever furnished a copy of your distributor agreement 18349, sheets 1 and 2, referred to in your distributor price list?

Mr. Brown: Objected to.

Objection sustained.
Exception noted.

Defendant rests.

REBUTTAL

WALTER A. GRAHAM, called in rebuttal, having been duly sworn, testifies as follows:

Direct examination.

Mr. Brown:

Q. You are the same Mr. Graham who testified in prima facie?

A. Yes, sir.

Q. Mr. Graham, during the defendant's testimony the question of melting points of solders came up, and the Court asked the question if the melting point was not a definite or an absolute temperature. Will you explain what you mean by melting point of these solders of the class of the two MacGregor Patents and the Jones Patent that we have [fol. 181] been discussing?

A. The melting points of these solders—I would like to qualify that. There is no definite melting point of these solders we have discussed, other than the eutectic composition. The materials start to melt at a temperature and is completely molten at another temperature.

Q. What is the range between the beginning of melting and the completion of melting in the three solders that we are considering here, that is, the Jones phos-copper solder and the MacGregor silver and tin solders?

A. To my knowledge, the range is in excess of 100 degrees Centigrade.

Q. What has been your observation as to the beginning of melting of the Jones phos-copper solder, of the kind that has been made commercially by Westinghouse, and the point at which it becomes completely fluid in Centigrade degrees?

A. The beginning of melting is at 707 Centigrade and the material is entirely liquid at 832 Centigrade.

Q. At what temperature approximately would such a solder be used for soldering?

A. It would have to be used in excess of 832 Centigrade to be a good solder.

Q. Now, as to the MacGregor phosphorous copper tin, tin being specified as one-half of one percent, what has been your observation as to where that solder commences to melt?

[fol. 182] A. It commences to melt at 705, plus or minus one-half degree, approximately 705, and is completely fluid at 822 Centigrade.

Q. And it also would be used at some temperature above 822?

A. That is correct.

Q. What has been your observation as to the point at which the MacGregor copper phosphorous silver solder would commence to melt?

A. It commences to melt at somewhere on the order of approximately 685 degrees Centigrade and it is entirely liquid in excess of 800 Centigrade.

Q. And then it is actually used in a temperature something over 800 degrees Centigrade?

A. That is right.

Q. Now, Mr. Graham, just as a matter of practice or interest and information, what has been the condition of these solders in this intermediate range between say 700 and 800 plus?

A. The solders in that range are composed of a material that is liquid, mixed with a material that is solid. In other words, it is a mushy condition.

Q. In other words, it passes from a pasty state after it starts to melt, before it becomes fluid?

A. That is correct.

Q. And that state extends over more than 100 degrees Centigrade?

A. Yes.

Q. You heard the testimony and the reading into the record this morning of the statement about the proportion of phosphorous that is taught by the Canzler Patent, de-
[fol. 183] fendant's Exhibit C. How do you interpret that Canzler Patent as to its teaching of the proportion of phosphorous to be used in the alloy which Canzler discloses?

Mr. Jaspert: I object to the question because this witness has not been qualified as an expert, and he is no more capable of saying what is in that Canzler Patent than MacGregor.

The Court: I think he was qualified as an expert when he first testified. I thought he said he was a metallurgical engineer.

Mr. Jaspert: So is Mr. MacGregor.

The Court: Mr. MacGregor never testified he was a metallurgical engineer.

Mr. Jaspert:

Q. Are you a technical graduate engineer?

A. I am.

Q. What has been your field of experience in these alloys, these non-ferrous alloys?

A. Approximately 15 years with non-ferrous.

Q. Have you worked with welding alloys and soldering alloys?

A. Yes.

The Court:

Q. Where did you graduate?

A. Michigan College of Mining and Technology, Houghton, Michigan.

[fol. 184] Mr. Brown:

Q. Did you graduate as a metallurgical engineer?

A. Yes.

Q. The question was, what the disclosure of the Canzler Patent means to you?

The Court: Objection overruled.

Exception noted.

Mr. Brown:

Q. What do you understand from the disclosure of the Canzler Patent as to the amount of the phosphorous which

it teaches to be used in the alloy which it is attempting to patent?

Mr. Jaspert: I object again to the question that is asked in regard to this patent and what is disclosos. The patent speaks for itself.

The Court: This is rebuttal testimony. Mr. MacGregor has given his interpretation of this Canzler Patent. He specifically stated the phosphorous content therein, and he has worked it out right here in Court. This testimony is by way of rebuttal.

Mr. Jaspert: When I asked Mr. MacGregor in chief concerning any patent, I was stopped, and also in rebuttal.

Objection overruled

[fol. 185] Exception noted.

(Question read).

A. In the Canzler Patent, if I may read some of the lines in this——

Mr. Brown:

Q. Answer and give your reasons.

A. My answer to that question would be that the phosphorous content of the alloy disclosed in Canzler is less than one percent.

Q. Upon what do you base that understanding?

A. The patent, beginning at line nine, reads as follows: "Hitherto in welding copper phosphorous was generally employed as a reducing agent for preventing an oxidation of the copper." Further down, in line 20, the phrase, "Which contained, beside the phosphorous, also tin and zinc at varying percentages". So I would interpret the patent merely states what had been used before this disclosure. Beginning in line 27: "According to the present invention, a copper wire shall be used for such welding operations, which contains besides the amount of phosphorous necessary to the welding operation, also silver in quantities up to five percent." So I interpret this disclosure is that he has disclosed an alloy of approximately the same phosphorous content that had been used before this disclosure was filed, and the amount of the phosphorous necessary as a de-oxidizer or reducing agent of the copper, to my knowledge and experience, is less than one percent.

[fol. 186] Q. The Daudelin Patent, defendant's Exhibit B, describes a solder comprising 22 parts of silver, 42 parts phosphorous, 238 parts copper, 1338 parts of lead, 5051 parts of tin, aluminum 50 parts and zinc 939 parts. Would such a solder as that be classed as a soft solder to which Mr. MacGregor referred?

A. Yes.

Q. Such solders are not used for the purposes for which the three solders that are being discussed here particularly are used?

A. No, they are not.

Q. Will you examine the Maxon Patent, Defendant's Exhibit D, and state whether or not that would also be a soft solder?

Q. And would not be usable for purposes of the MacGregor and the Westinghouse Jones phos-copper solder. Is that right?

A. Yes.

Cross-examination.

Mr. Jaspert:

Q. Mr. Graham, with reference to the Canzler Patent, the portion that you read that phosphorous is generally employed as a reducing agent for preventing oxidation of the copper, would you say that one percent phosphorous and ninety-nine percent copper would act as a reducing agent in the use of that alloy for welding?

A. Yes.

Q. Would prevent oxidation?

A. Yes, sir.

[fol. 187] Q. Would you say two percent would likewise act that way?

A. Yes.

Q. Seven percent?

A. Yes.

Q. Would you consider Mr. Otto Eschholz, an authority on welding alloys?

Mr. Brown: That is objected to as irrelevant and immaterial and not proper cross-examination.

Mr. Jaspert:

Q. Do you know Mr. Otto Eschholz of the Westinghouse Company? Isn't he right here in this room?

A. Pardon me. I thought you said "Schultz." Yes, I know Mr. Eschholz.

Q. Are you familiar with the Eschholz Patent No. 1,652,107 relating to copper phosphorous welding alloys?

A. Yes.

Mr. Brown: I object to that as irrelevant and immaterial and outside the scope of the direct examination.

The Court: It is, but we will let him ask it.

Objection overruled.

Exception noted.

Mr. Jaspert:

Q. Would you say that the statement that a suitable copper alloy containing approximately five to ten percent of [fol. 188] phosphorous for welding non-ferrous metals had a selective oxidation in such welding and that it prevents or decreases oxidization of the copper?

A. Yes.

Q. Then you can not base your finding of one percent in Canzler on the fact that Canzler says that his use of phosphorous is to reduce or prevent oxidization. Is that correct?

A. That is what Canzler discloses.

Q. Does he disclose one percent phosphorous?

A. No, he does not. He discloses an oxidizing or reducing agent.

Q. That is what you paraphrase Eschholz's and Canzler as to the oxidation being prevented by the use of phosphorous?

A. I don't quite understand what your question is. Here it says, "Selective oxidation of some phosphorous in such welding rod during the welding operation". I don't see where that refers to five or ten percent.

Q. Read on there. Doesn't it say seven to ten percent is the preferred amount?

A. Not for selective oxidization.

Q. Read into the record. "The selective oxidization of some phosphorous in such a welding rod during the welding operation, I have found prevents or decreases oxidization of the copper, therefore producing a sound density while

the transferred phosphorous gives density to the metal, a characteristic of flowing freely when fused. These char- [fol. 189] acteristics are particularly pronounced in the eutectic alloy which contains about 7.3 phosphorous." In fact, that statement compared with Canzler's statement hitherto in welding copper and phosphorous was generally employed as a reducing agent for preventing oxidization of the copper. Does that give you any basis for stating that Cantzler refers to one percent phosphorous?

A. No. I said my interpretation of Cánzler was that the phosphorous contained was less than one percent, and was only present as a de-oxidizer or reducing agent.

Q. And you base it on the Canzler statement that it was to be used as a de-oxidizer and reducing agent?

A. Correct.

Q. Will you refer to the statement of Canzler on line 40: "The welded joints may be worked in a heated condition." In your experience what would that mean with reference to the phosphorous content?

A. That would not mean a thing.

Q. It indicates it would be brittle if you worked it cold, wouldn't it?

A. Not necessarily.

Q. It would mean it had a high phosphorous content, would it not?

A. The phrase: "The welded joints may be worked in a heated condition", that would not indicate whether phosphorous was high or low.

Q. And the description in Canzler as to a necessary [fol. 190] amount of phosphorous would mean nothing in particular to you?

A. Other than the necessary amount for a reducing agent or a de-oxidizing agent.

Q. And one percent is sufficient?

A. In my opinion.

Q. And the Eschholz Patent is wrong?

A. No.

Mr. Brown:

Q. Mr. Graham, as I understand your testimony about the Canzler Patent, it was that where the phosphorous was simply a de-oxiding agent your understanding was that one percent or less was sufficient for that purpose?

A. Correct.

Q. And that since the Canzler Patent referred to it only for that purpose, you would understand it to be used in that amount?

A. Correct.

Q. It is your understanding of the practical art that it was so used at that time for that purpose?

A. Yes.

Q. Whereas in the Eschholz Patent, phosphorous was put in for a certain additional purpose?

A. Yes.

Q. Such as increasing the fluidity and other purposes?

A. Yes.

Q. And in your interpretation of the Canzler Patent is given as a metallurgical engineer, reading it for what ap- [fol. 191] pears on its face and in the light of your knowledge of the art as of that day?

A. Yes.

The Court:

Q. You say there is no absolute melting point in the sense that certain substances melt at a given temperature, Centigrade or Fahrenheit. That point is always absolute insofar as that particular thing is concerned. Is that correct?

A. In our terminology I would not term it absolute.

Q. Then there is no such thing as an absolute melting point because the substance, whatever it may be, begins to melt at a given point and reaches certain stages of melting. In other words, the arc goes up and down as the case may be. Is that right?

A. In practical or commercial materials if you could determine, let us say, the absolute melting point, if you could get that material absolutely pure. For practical and commercial work we speak of pure materials, but according to the spectograph analysis, they are not absolutely pure.

Q. Is it correct to say that the eutectic is absolute, if we take an alloy such as copper and phosphorous?

A. You could say it was absolute provided you recognize the small amounts of impurities present.

Mr. Jaspert:

Q. Would you know, if a copper phosphorous alloy melts [fol. 192] at say 797 degrees, what percentage of phosphorous is in that alloy?

Mr. Brown: I object to that question. I don't think the direct examination led the witness up to that.

Mr. Jaspert: I would like the witness to answer whether he knows, after experimentation, as an expert, if a copper phosphorous solder melting at 800, 850 or 750, contains a definite percentage of phosphorous. I think that is a fair question.

The Court: I don't think it is a fair question because you have a different melting point each time.

Objection sustained.

Exception noted.

Mr. Jaspert: I would like to note this of record, that Mr. Brown's questions were not with reference to any specific solders or any specific alloys of any percentages that he mentioned.

The Court: That is not the recollection of the Court. The recollection of the Court is that on the examination of Mr. MacGregor, he was questioned about the three solders that are here in controversy, and every question was relating to an individual alloy, first as to its composition, as to its melting point and as to the point of fluidity, and so forth. [fol. 193] They were specific and direct and were confined to the solders here concerned.

Exception noted to defendant.

Plaintiff Rests in Rebuttal.

Testimony Closed.

STIPULATION AS TO TRIAL

Mr. Booth: It having been stipulated that the case shall be tried without a jury, the case, of course, governed by the act of 1874, P. L. 109, as amended by th ct of 1935, P. L. 640. Now, if your Honor should find both on the counter claim and on our own claim, for the plaintiff, without any qualification, then we request nothing more, but if, however, your Honor should decide that on the main claim

we are not entitled to full relief we pray for, or that the defendant is entitled to any relief on the counter claim, then we respectfully request your Honor to state separately and distinctly the facts found and the answers to any points submitted in writing by counsel, and the conclusions of law in order that we may file exceptions thereto and take an appeal. Of course, we sincerely hope, your Honor, that will not be necessary, and you will find for the plaintiff both on its claim and also against the defendant on his counter claim.

[fol. 194] Mr. Jaspert: I suppose it is in order for me to request the same thing, your Honor.

CERTIFICATES TO STATEMENT OF EVIDENCE

I hereby certify that the proceedings and evidence are contained fully and accurately in the shorthand notes taken by me on the trial of the above cause and that this is a correct transcript of the same.

Jos. C. Cordell, Official Reporter.

The foregoing record of the proceedings upon the trial of the above cause is hereby approved and directed to be filed.

By the Court. S. M. S.

[fol. 195] PLAINTIFF'S EXHIBIT 2

License Contract Copy

This agreement executed in duplicate this 16th day of November, 1937, by and between Westinghouse Electric & Manufacturing Company, (hereinafter called Westinghouse), a corporation of the State of Pennsylvania, having its principal place of business at East Pittsburgh, Pennsylvania, U. S. A., and Alpine MacGregor, whose residence is 272 Cascade Road, Borough of Forest Hills, County of Allegheny, State of Pennsylvania (hereinafter called MacGregor):

Whereas, Westinghouse is the owner of the entire right, title and interest in and to Letters Patent of the United

States No. 1,651,709 issued December 6, 1927, covering a Brazing Solder.

Whereas, MacGregor desires to acquire a non-exclusive license to make, use and sell brazing solders embodying said invention throughout the U. S. A., its territories, dependencies and possessions.

Now, Therefore, Be It Known That for and in consideration of the sum of One Dollar ($1.00) paid by MacGregor to Westinghouse, and other valuable consideration, the receipt of which is hereby acknowledged, the parties have agreed as follows:

[fol. 196] 1. Westinghouse hereby grants unto MacGregor a non-exclusive right and license under said Letters Patent No. 1,651,709 to make, use and sell throughout the United States of America, its territories, dependencies and possessions, brazing solders embodying the inventions described and claimed in said Letters Patent and any reissues and extensions thereof throughout the entire term of said Letters Patent, unless this agreement should be previously cancelled as hereinafter set forth.

2. MacGregor agrees to pay Westinghouse as royalties or license fees, ten percent (10%) of MacGregor's net selling price of the brazing solder embodying the invention covered by said Letters Patent. Under this agreement, brazing solders shall be considered to be sold when billed out, or if not billed out when delivered, or when paid for if paid for before delivery, but royalties paid on brazing solders which are not accepted by the customer shall be credited against further royalty payments to be made hereunder.

3. On or before the first days of February, May, August and November of each year, MacGregor shall render a report to Westinghouse showing the quantity of brazing solders embodying the invention covered by the Letters Patent sold by MacGregor during the preceding quarter or three months' period ending respectively on the last days of December, March, June and September of each year, and with each of said reports MacGregor shall make pay-
[fol. 197] ment to Westinghouse of the royalty which shall be due and payable in accordance with the provisions of paragraph 2 hereof.

At all times Westinghouse or its duly authorized agent or attorney shall have access to the books of MacGregor insofar as the same shall be pertinent to the subject matter of this agreement and MacGregor shall have the right to have a representative present when any examination of the books of MacGregor shall be made.

4. MacGregor agrees to mark all brazing solders which he shall manufacture and sell and which embody the invention constituting the subject matter of this agreement with the word "patented" or an abbreviation thereof, such as "Pat.", together with the number of the Letters Patent for the invention embodied in said brazing solder.

5. Westinghouse grants this license on the express condition that the prices, terms and conditions of sale for use or sale in the United States of America, its territories and possessions of brazing solders embodying the invention covered by said Letters Patent and so long as such brazing solders continue to be covered by said patent, shall be no more favorable to the customer than those which from time to time Westinghouse establishes and maintains for its own sales of similar or competing brazing solders under such patent to such or other similarly situated customer purchasing in like quantities. MacGregor shall be notified of all [fol. 198] such prices, terms and conditions of sale fixed by Westinghouse.

The prices, terms and conditions of sale of Westinghouse may be changed by Westinghouse from time to time, notice being given MacGregor, but not less than five days' notice shall be given before any such change shall go into effect.

6. It is agreed that it shall be regarded as an evasion of this agreement amounting to a breach thereof for MacGregor to reduce Westinghouse's sale price or alter Westinghouse's selling terms and conditions of sale directly or indirectly either through its own organization, its agents or others by any device, subterfuge or evasion or by any means whatever or to make the prices lower or the terms or conditions more favorable than those set forth by Westinghouse.

7. In the event that MacGregor should fail to fulfill any of his covenants as set forth in this agreement, Westing-

house shall have the right to cancel this agreement and the license granted herein upon sixty (60) days' written notice to MacGregor unless such default shall be made good within thirty days after the receipt of said notice by MacGregor.

8. In the event of cancellation of this agreement, said MacGregor shall have the right to fill all bona fide orders which he has on his books at the date when such cancellation becomes effective and shall also have the right to sell all brazing solders embodying said invention or any of [fol. 199] them which shall be on hand or in process of manufacture at the time when such cancellation becomes effective, provided that with respect to such sales made after such cancellation, MacGregor shall pay royalties to Westinghouse at the aforesaid rate within thirty (30) days after each such sale involved.

9. It is understood and agreed that the license herein granted shall be personal to MacGregor, except that in case of his decease, his executors or administrators shall have the right to operate under this license for the benefit of his heirs.

10. It is understood and agreed that unless previously terminated as provided in Article 7 hereof, this license shall run for the term of the said Letters Patent.

On termination of this agreement by cancellation or otherwise, Westinghouse and MacGregor shall each be restored to its or his respective rights and privileges the same as though this agreement had not been made, provided that such termination shall not affect any of the rights of Westinghouse to proceed against MacGregor for the breach of any of the terms hereof prior to such termination, nor shall any consent or acquiescence by Westinghouse in any of the practices of MacGregor in any way estop or be used against Westinghouse in any action, proceeding or complaint by Westinghouse against MacGregor after such termination.

In Witness Whereof each of the parties hereto has caused this instrument to be executed in duplicate, Westinghouse [fol. 200] by the signature of its President and attestation of its Secretary, and the attachment of its corporate seal

hereto, and MacGregor by his signature and seal on the day and year first above written.

Westinghouse Electric & Manufacturing Co., by G. H. Bucher (Sgd.), Executive Vice President. (Seal.).

Attest: L. H. Lund (Sgd.), Secretary. By Alpine MacGregor (Sgd.)

Witness: —— ——.

[fol. 201] PLAINTIFF'S EXHIBIT 3

Appendix—Correspondence on "Resale" Prices

William B. Jaspert, Farmers Bank Building, Pittsburgh, Pa.

August 12, 1940.

Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.

Attention E. W. Savage, Esq., Patent Department

DEAR MR. SAVAGE:

Following our discussion at my office *re* MacGregor copper phosphorous silver alloy coming under the Jones patent, I have now had the opportunity of further discussing this situation with Mr. MacGregor, and while he is of the view that it is to the interest of all concerned to sustain the Jones patent for its unexpired term, he is not interested in doing so excepting under practical and workable conditions.

Without admitting that the silver alloy is embraced within any valid scope that can be given the Jones patent, we are willing to pay royalties on this alloy as of August 1st of this year, and to maintain the new schedule of prices and discounts effective as of that date.

Provided further: that Mr. MacGregor's future relations with the Westinghouse Electric & Mfg. Company in regard to his license will be strictly in accordance with the [fol. 202] terms and provisions of that license and not in accordance with the whims and desires of the Westinghouse commercial department.

We know of no authority under patent cases which extends a patent monopoly to entitle a patent owner or licensor to run the affairs of a licensee.

The express condition of paragraph 5 of the license to require that the price terms and conditions of sale shall be no more favorable to the customer than those which from time to time Westinghouse establishes and maintains is meaningless unless the licensee is advised and informed of the conditions under which the licensed produce is sold by Westinghouse. Obviously, Westinghouse would tolerate no investigation by the licensee of Westinghouse sales or conditions of sales, and the sum and substance of paragraph 5 can only be that MacGregor will maintain the schedule of prices as they shall be established from time to time, as a basis for the payment of royalty only. *The requirement that the licensee establish a user price per pound in addition to the original sales price or dealer price is illegal under the recent pronouncement of the Supreme Court in the Ethyl Gas case as an attempt to extend the patent monopoly in restraint of trade. I cannot advise my client to even attempt to enforce such a price schedule as it would subject him to prosecution by the Department of Justice as a co-conspirator in violation of the Clayton Act, entailing fine and imprisonment.*

[fol. 203] *Personally, it is the writer's view that such a price schedule, particularly with the conditions as appear therein, is unenforceable because such conditions are in restraint of free trade.*

I have suggested to Mr. MacGregor that in the future he make his royalty reports and royalty payments through me so that if any questions arise as to methods of accounting and how the sales of licensed materials should be accounted for, they will be called to my attention, and if Westinghouse in the future makes any changes in price schedules or conditions of sale, they should be referred to the writer instead of Mr. MacGregor.

My experience with patent royalty contracts convinces me that the only rights that a licensor can exercise under such contract is to enforce the payment of the royalties in accordance with the provisions thereof, and the maintenance of a schedule of prices as a basis for royalty payments without injecting a lot of conditions of sale that have nothing to do with the patent or the license grant.

Mr. MacGregor in accepting the license is buying and paying for immunity under the patent and that is all that Westinghouse is granting. We are perfectly willing to live up to such an arrangement so long as it does not attempt to unduly restrict and restrain Mr. MacGregor in the conduct of his business.

Yours very truly, William B. Jaspert.

WBJ:S.

[fol. 204] PLAINTIFF'S EXHIBIT 4

October 23, 1940.

Mr. William B. Jaspert, Farmers Bank Building, Pittsburgh, Pennsylvania.

DEAR BILL:

License Agreement under U. S. Patent 1,651,709. G. F. 6008

This is in reply to your communication of August 12, 1940. I regret the long delay in answering your letter, but, as you recall, my vacation intervened. Further, I have had to make innumerable trips on business which increased the delay. However, I feel that delaying this matter will accommodate Mr. MacGregor.

After our interview on August 15, 1940, I made a note to the effect that you would recommend to Mr. MacGregor that he should pay the back royalty on his phosphorus-copper-silver alloy, provided we make arrangements to give him some time. I explained this situation to our interested parties and they considered it a reasonable basis for a settlement.

I understand that Mr. MacGregor and our Mr. Seastone had a long discussion of our price schedules, and that they are now in agreement on just what these price schedules mean. *Therefore, there need be no further misunderstand-*
[fol. 205] *ings on the part of MacGregor as to what is involved under the terms of the license agreement.* We never interfere in the affairs of our licensees. If, as in this particular situation, we have a number of licensees, we feel obligated to investigate from time to time to ascertain if all licensees are conforming to the price schedules.

I do not believe there is any basis for contending that we have endeavored to establish a user price per pound in addition to the original sales price or dealer price. Certainly if Mr. MacGregor sells directly to the user, he should conform to the user prices established, and when he sells directly to the dealer, he should conform to the dealer prices established. I do not believe that at any time we have tried to go further than this. This has been our viewpoint long before the Ethyl Gas decision.

I understand that our Accounting Department has determined the amount of royalty due under the phosphorous-copper-silver alloy, and I feel that Mr. MacGregor should proceed to make some settlement of the matter.

I am requesting that in the future all changes in price schedules of phosphorous-copper alloys be forwarded to your office.

Very truly yours, Ezra W. Savage, Patent Department.

EWS:SH

[fol. 206] DEFENDANT'S EXHIBIT "A"

File History Patent No. 1,651,709

——————1921

Serial No. 481,613. Div. 3

Patent No. 1,651,709. Jesse L. Jones of Edgewood Park, Pennsylvania. Solder

Application filed Complete, June 30, 1921.
Examined and Passed for Issue, May 7, 1927.
A. Lindsey, Exr. Div. 3.
Notice of Allowance, May 7, 1927.
Final Fee $20.00, November 7, 1927.
Patented: December 6, 1927.
Attorney: Wesley G. Carr, c/o Westinghause E. & M. Co., East Pittsburgh, Pa.
Assor. to Westinghouse Electric & Manufacturing Company a corporation of Pennsylvania.
Class 75-1.)

Contents

1. Application papers.
2. Rejection, August 1, 1921.
3. Amendment A, July 5, 1922.
4. Rejection, August 9, 1922.
5. Amendment B, July 28, 1923.
[fol. 207] 6. Letter, August 22, 1923.
7. Letter, December 5, 1923.
8. Letter, February 2, 1924.
9. Amendment C, Jan. 26, 1925.
10. Rejection, April 18, 1925.
11. Amendment D, April 15, 1926.
12. Rejection, July 29, 1926.
13. Amendment E, August 24, 1926.
14. Rejection (Final) November 30, 1926.
15. Amendment F, April 27, 1927.
16. Amendment G (R. 78) October 13, 1927.
17. Notice of Entry of Amendment October 15, 1927.
18. Notice of Suit, April 1, 1937.

References:

Pages 283 and 284 of "Metallic Alloys" by Gulliver, Published by Chas. Griffin and Co., London, 1913.
Maxon 532,890.
Dandelein 989,573.
Canzler et al. 1,103,482.
Heaton (Br.) 5,560 of 1892.
Universal Metals (Fr.) 417,307.

Search Notes: 75-1.

[fol. 208] Paper No. 1. Application. June 30, 1921

Petition—Gives Applicant's post office address as: 198 Dewey St., Edgewood Park, Pa.

Power of Attorney—Wesley G. Carr.

Specification—Same as printed copy of patent attached, amended as indicated thereon.

Original Claims:

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1. A solder comprising an alloy of copper and phosphorus.

Cancelled Per B

2. A solder comprising a eutectic alloy of copper and phosphorus.

3. A solder comprising an alloy of copper and phosphorus containing less than 10% of phosphorus.

4. A solder comprising an alloy of copper and phosphorus containing about 6% to 9% phosphorus.

5. A solder comprising an alloy of copper and phosphorus containing 8.2% phosphorus.

Cancelled Per A

6. A solder comprising an alloy copper and phosphorus which is hard, tough and strong.

Cancelled Per B

6 7. A solder comprising an alloy of copper and phosphorus which melts at about 700° C.

Cancelled Per A

8. A solder comprising a eutectic alloy of copper and phosphorus containing 8.27% phosphorus which melts at 707° C.

Insert B' (p. 7 & 8)

[fol. 209] Oath—Usual formal oath, no foreign patents or applications referred to therein. Executed June 22, 1921 before E. E. Little, Notary Public, County of Allegheny, Penna.

Paper No. 2 Rejection August 7, 1921

Claims 1 and 6 are not substantially different from each other nor are claims 5, 7 and 8.

All of the claims are rejected in view of the following disclosure:

Pages 283 and 284 of "Metallic Alloys" by Gulliver, Published by Chas. Griffin and Co., Longon, 1913.

J. N. Wm. J. Rich, Examiner, Div. 3.

Paper No. 3 Amendment "A" July 5, 1922

Acknowledging the Examiner's Letter of August 1, 1921, I hereby amend this application as follows:

Cancel claims 6 and 8 and renumber claim 7 as 6.

Remarks:

Claims 5 and 6, which were stated by the Examiner to be substantially the same, may be clearly differentiated from each other. Claim 5 is directed to an alloy of copper and phosphorus, the phosphorus content thereof being 8.27%. This alloy has a melting point of about 707° C. Claim 6 [fol. 210] is directed to an alloy of phosphorus and copper which melts at about 700° C. The latter claim is somewhat broader than claim 5 in that it is not limited to a composition containing 8.27% phosphorus but to a material having a certain melting point which includes a range of alloys in the neighborhood of 8% phosphorus. Claim 6 is considered to be broader than claim 5 and patentably distinct therefrom.

All the claims in the case were rejected on an article describing various copper phosphorus alloys. Among the alloys described is the eutectic containing 8.2% phosphorus melting at 707° C. Applicant admits that he is not the first to produce a copper phosphorus alloy of this approximate composition but believes that he has discovered new properties of such alloy which make it especially adapted for application in soldering. His claims are, therefore, limited to a solder which comprises the copper phosphorus alloy which he has found to be of considerable utility in brazing various articles.

Specifically applicant has applied his invention to the brazing of bars to end rings to provide the squirrel cages of induction motors. He has been enabled by reason of the new application of this material to lower the temperature of brazing from 1000° to 1100° C. to slightly over 700° C. He has thereby avoided the danger of hydrogenation of copper because of absorption of hydrogen from the flame and he has also avoided warping of the rotor which occurred on account of the intense heat. He has further accomplished a considerable saving of gas which is used for heating in [fol. 211] that, instead of providing a furnace having a series of burners which are directed upon the end rings, he

utilizes but a single burner or blow-torch which has been found sufficient to graze his new solder to the parts to be joined.

This new solder has a relatively low melting point, does not readily oxidize when heated, has a high degree of fluidity when melted and is, therefore, capable of readily penetrating between the parts to be joined and is hard, tough and strong.

In view of the advantages residing in the new application of the old material and the great utility of this invention, it is believed that claims directed to a solder of a well-known copper phosphorus alloy are drawn to patentable subject matter.

Reconsideration and favorable action on the claims are requested.

Paper No. 4 Rejection August 9, 1922

Responding to amendment filed July 5, 1922

All the claims are rejected for the reasons of record. The alloy being old it is not seen how claims can be allowed directed to the composition, even though they may be so stated as to cover the use. Possibly the case may involve invention as regards the new application of the old material but if so it would seem that the invention must be in the method involving such use.

[fol. 212] All of the claims are more or less indefinite inasmuch as they are so worded as to cover compositions having not only those ingredients set forth but any and all others. For example, the patent to—Maxon 532,890 Jan. 22, 1895, Alloys 500.9, sets forth solders which come within the terms of claims 1, 3 and 4, even though it is obvious that the properties of such compositions must necessarily be substantially different from what applicant has disclosed. These claims are rejected on this patent. Claim 4, it is true, states that the minimum amount of phosphorus is 6% while the patent sets forth the maximum of 5% but it is questioned whether there would be any substantial difference between an alloy like that of Maxon's containing 5% and one containing 6.%

H. N. Wm. J. Rich, Examiner, Div. 3.

Paper No. 5 Amendment "B" July 28, 1923

Acknowledging the Examiner's letter of August 9, 1922, I hereby amend this application as follows:

Cancel the claims in the case and substitute in lieu thereof the following:

B' Cancelled Per F

1. A method of soldering which comprises providing an alloy of copper and phosphorus, melting the same and allowing the molten material to come into contact with the parts to be joined.

2. A method of soldering which comprises providing a eutectic alloy of copper and phosphorus, melting the same [fol. 213] and allowing the molten material to come into contact with the parts to be joined.

3. A method of soldering which comprises providing an alloy of copper and phosphorus containing less than 10% phosphorus, melting the same and allowing the molten material to come into contact with the parts to be joined.

B' Cancelled Per F

4. A method of soldering which comprises providing an alloy of copper and phosphorus containing about 6-9% phosphorus, melting the same and allowing the molten material to come into contact with the parts to be joined.

5. A method of soldering which comprises providing an alloy of copper and phosphorus containing 8.27% phosphorus, melting the same and allowing the molten material to come into contact with the parts to be joined.

6. A method of soldering which comprises providing an alloy of copper and phosphorus, melting the same at about 700° C. and allowing the molten material to come into contact with the parts to be joined.

Insert C' (p. 11 & Patent)

Remarks:

In accordance with the Examiner's suggestion that the invention must reside in the method involving the use of the phosphor copper alloy, applicant has revised all the claims

in the case and they now are presented in the form of method claims.

[fol. 214] The patent to Maxon, cited by the Examiner, describes an alloy containing 5% phosphorus and 6⅔% copper. It is intended primarily as an aluminum solder and the composition thereof includes seven metals, amongst which are the copper and phosphorus. The nature and characteristics of the alloy are entirely different from the alloy utilized by applicant. The claims clearly distinguished from all the references of record in that they are limited to a method of soldering which includes the melting of an alloy of copper and phosphorus at a certain temperature and soldering parts to be joined therewith.

It is considered that the claims are clearly allowable over the art, and favorable action thereon is, therefore, requested.

Paper No. 6 Letter August 22, 1923

Responding to amendment filed July 28, 1923

Since applicant's invention, at most, is of a rather specific character the invention. It is old to use alloys containing copper and phosphorus for soldering and it is accordingly thought that to differentiate from such old practice it is essential that the claims of this case be definitely limited to the specific composition employed, that is to a method involving the use of the specific compositions.

H. N. Wm. J. Rich, Examiner, Div. 3.

[fol. 215] Paper No. 7 Letter December 6, 1923

Acknowledging the Examiner's letter of August 22nd, 1923, the Examiner's rejection is not understood. He requires that the claims in this case be limited to a method involving the use of the specific compositions described in the specification, since it is old to use alloys containing minor proportions of copper and phosphorus for soldering. The claims which applicant presented in his amendment of July 28th, 1923, are believed to clearly differentiate from the prior art. The claims are limited to a method of soldering, which includes the use of an alloy of copper and

phosphorus and more specifically to an alloy containing 8.27% phosphorus.

It is believed that the claims are sufficiently specific to clearly indicate applicant's contribution to the art. In view thereof, a favorable action on the merits is requested.

Paper No. 8 Letter February 2, 1924

Responding to communication filed Dec. 5, 1923.

It is thought the claims should be directed to a solder specifically instead of to the method, since the method appears to be a common one in soldering.

R. Wm. J. Rich, Examiner Div. 3.

Paper No. 9 January 26, 1925

Amendment "C"

Acknowledging the Examiner's letter of Feb. 2, 1924, I hereby amend this application as follows:

[fol. 216] Add the following new claims:

1 7. Same as claim 1 of patent, without change.

C' 2 8. Same as claim 2 of patent, amended as indicated.

3 9. Same as claim 3 of patent, without change.

C' 10. A brazed structure comprising copper and an alloy of less than 10% phosphorus.

Cancelled Per D 11. A brazed structure comprising a copper alloy and an alloy of less than 10% of phosphorus.

---

13 12. A brazed joint comprising copper and an alloy containing copper and phosphorus, said joint containing a decreasing amount of phosphorus in the metal on either side of the midpoint of said joint as the distance from said midpoint increases.

Cancelled Per F 14 13. A brazed joint comprising a copper alloy and an alloy containing copper and phosphorus, said joint containing a decreasing amount of phosphorus in the metal on either side of the midpoint of said joint as the distance from said midpoint increases.

	5	15	14.	Same as claim 5 of patent, without change.
C'	6	16	15.	Same as claim 6 of patent, without change.

Insert D'D2 D3 (pp. 14 & 15 & patent)

[fol. 217] Remarks:

New claims 7 to 15 are submitted herewith. Some of the new claims are directed to a solder in accordance with the Examiner's suggestion, others are directed to a joint made of the solder and of the materials that are joined and still others are directed to a method of soldering or brazing that is specific to applicant's combination.

The Examiner is reques[illegible] to reconsider the claims 1 to 6, as it is believed that app icant not only has a new solder but he also has contributed a new variation in principle in the art of soldering.

The solders hitherto used were the well known yellow brass or zinc alloys or the silver solder. The usual objection to such solders is that they oxidize and, even when fluxes are used to eliminate the oxides, there can be no assurance that the joint will be sound and free from weak spots. Many serious accidents have occurred from defective brazed joints in places such as on shipboard where copper brazed steam pipes have broken in or near the brazed joint as a result either of included oxides or as a result of overheated metal.

Applicant's solder melts at such a low temperature that the metal is not injured by heating. When melted, the solder is practically fluid and it requires no flux to eliminate the oxides. Phosphorus readily unites with the copper or copper alloy of the material that is being united, so that when the solder is once melted it flows into the irregular places and at once alloys with the solid metal on either side [fol. 218] thereof without the use of a flux or other scavenger. A peculiar property of phosphorus is that it will continue to diffuse into copper even when it is not molten. The result is that the finished joint is actually a compound of rather low phosphorus copper extending a considerable distance on either side of the original point of contact of the two pieces of metal.

The latter property of phosphorus to diffuse into copper is also utilized in a method of preparing a copper phosphorus alloy used in preparing applicant's solder. The copper is heated in a closed tube and phosphorus vapor is passed into the chamber. The phosphorus is found to diffuse completely through solid copper bars of considerable thickness. The success of the process of preparing the alloy depends on the same principle that contributes to the new soldering properties utilized in the subject matter of this application.

It is believed that the patentable subject matter is now adequately defined in the claims and reconsideration and favorable action are requested.

Paper No. 10 Rejection April 18, 1925

Responding to amendment filed Jan. 26, 1925.

Claims 1 to 6 inclusive are rejected because they are considered to cover nothing but the ordinary soldering process. Claims 14 and 15 which recite he special conditions that are involved in the soldering are allowed.

[fol. 219] Claims 7, 8 and 9 are rejected as unpatentable over the ordinary cupro-phosphorus, well known in the art, such as is disclosed, for example, in the book by Gulliver of record.

Claims 10 and 11 are rejected because they do not definitely present any structure. Claims 12 and 13 which set forth the features which are considered to characterize applicant's invention are allowed.

HN. Wm. J. Rich, Examiner Div. 3.

Paper No. 11 April 15, 1926

Amendment "D"

Acknowledging the Examiner's letter of Apr. 18, 1925, I hereby amend this application as follows:

Rewrite claims 10 and 11 as follows:

D' 4 10. Same as claim 4 of patent, amended as indicated.

Cancelled Per F

11. A soldered joint comprising a plurality of metallic bodies and a uniting alloy of copper and phosphorus interposed between said bodies and intimately united therewith.

Insert claim 12 as follows:

D2 Cancelled Per F

12. A method of soldering which comprises providing an alloy of copper and phosphorus, melting the same and allowing the molten material to come into contact with the parts to be joined, the ratio of copper to phosphorus in said alloy being greater than 4 to 1.—

[fol. 220] Renumber claims 12 to 15, as claims 13 to 16. Add new claims 17 and 18 as follows:

D3 Cancelled Per F

17. The method of uniting metallic objects which comprises placing an alloy of copper and phosphorus between said objects and then heating to a temperature sufficient to form a unitary structure.

18. A soldered joint comprising a plurality of metallic bodies and a uniting alloy of copper and phosphorus interposed between said bodies and intimately united therewith, the ratio of copper to phosphorus in said alloy being greater than 4 to 1.

Remarks:

Claims 1 to 6 are believed to set forth a method not used in the ordinary process of soldering. In the ordinary process of soldering, a flux is used for dissolving and removing the oxides of the metals that are formed when they are heated. Applicant's solder may be used without a flux. It is pointed out in the specification that the solder is highly fluid when it is heated and that it may be used without a flux, particularly when uniting copper bodies. An alloy possesses certain properties which make it useful as a flux, and it is with those properties in mind that it is believed that

the process set forth in the claims is not the ordinary process of soldering.

Former claims 10 and 11 have been cancelled.

[fol. 221] Claims 7, 8, 9 and new claim 10 are believed to set forth patentable subject matter. Although some uses of the alloy are described in the reference to Gulliver, no useful purpose analogous to applicant's discovery is described. It was not known that the alloy could be utilized as a solder or that any useful purpose would be served by utilizing it as such.

In Hogan vs. Westmoreland Specialty Company, 163 Fed. 289, it was held that "the scientific announcement that as the OH group in cellulose molecules are suppressed by combination (with negative radicals to form the cellulose esters), the products exhibit decreasing attractions for atmospheric moisture, while sufficient perhaps to advise the chemist, was not sufficient to constitute a matter of common knowledge, chargeable to makers of salt-cellar tops or dredges, that a celluloid cap would keep the salt dry when a glass or metal cap would not."

The reference does not suggest a useful manner in which the alloy of copper and phosphorus may be utilized as a solder. Applicant discovered a thing of value not suggested by the mere compounding of an alloy.

In General Electric Company vs. Hoskins Mfg. Company, 224 Fed. 464 (C. C. A. 7th, 1915) it was held that "discovery that a described metal alloy in stated properties when used as an electric resistance element is far superior to any previously known except platinum, the cost of which precluded its commercial use, with the result of greatly [fol. 222] advancing the art, constitutes patentable invention, although the alloy itself was known."

The alloy in question in the latter suit was previously known and used by others. The invention resided in utilizing the alloy for a new and useful purpose not hitherto contemplated. The alloy embodied in an electric resistance element was a superior resistance element to those made of other alloys.

Applicant's solder was investigated as an alloy. There appears to have been known a few valuable uses of the material as an alloy. Applicant discovered that the alloy was valuable when utilized as a solder. The utility of the alloy is not suggested in the references, nor is it suggested that the alloy, when utilized as a solder or brazing

material, is superior to silver solder, for the reason that it does not have to be heated to such a high degree as does silver, in order to unite with other metals. Furthermore, it was not discovered that metals could be joined by means of the alloy by heating the metals to a temperature insufficient to oxidize them. It was not known that a flux could be dispensed with in soldering when this alloy was utilized for that purpose.

Applicant has discovered a useful solder and it is believed that the discovery is patentable and was not known or used by others.

New claims 11 and 12 are for a soldered joint and set forth as elements thereof a plurality of metals to be joined, [fol. 223] and applicant's copper phosphorus alloy intimately united therewith. Although the claims are slightly broader in scope than former claims 13 and 14, they are believed to be within the scope of applicant's invention.

New claims 17 and 18 are for a method of uniting metallic bodies. The claims specify the alloy provided by applicant and are believed to be allowable for the same reasons as claims 1 to 6.

Paper No. 12 Rejection July 29, 1926

Responding to amendment filed Apr. 15, 1926.

Additional references:

Dandelein,	989,573,	Apr. 18, 1911,	Solders.
Canzler et al.	1,103,482,	July 14, 1914,	"
Brit. to Heaton	5,560,	Mar. 22, 1892,	"
French to Universal Metals	417,307,	June 20, 1910,	"

Claims 1 to 6 inclusive, and claims 12, 17 and 18 are rejected on the ordinary method of soldering without the use of a flux, shown in British to Heaton 5560, above cited.

Claims 8 and 10 are rejected on each of the patents to Dandelein, Canzler et al., and French 417,307, all cited above. The solders in each of the above patents all contain copper and phosphorus in ratios greater than 4 to 1, and since the addition of other metals which these alloys contain would tend to lower the melting point, it is believed

[fol. 224] that the solders of the references have melting points within the ranges claimed.

Claims 11, 13 and 14 are rejected on Canzler et al. Attention is directed to lines 9 to 16 of his specification as follows "Hitherto in welding *copper* phosphorus was generally employed as a reducing agent for preventing an oxidation of the copper. This phosphorus was applied to the welding either in form of *phosphorus copper* wire or of a phosphorus powder, which was strewn on the joint in the welding operation."

Claims 7, 9, 15 and 16 are allowed.

Since this case is more than five years old, applicant should prepare the case for final action.

A.G. A. Lindsey, Examiner Div. 3.

Paper No. 13 August 24, 1926

Amendment "E"

Acknowledging the Examiner's letter of July 29, 1926, I hereby amend the above-entitled application as follows:

Claims 8 and 10 amended as indicated on claims 2 and 4 of patent.

Remarks:

Claims 1 to 6, inclusive, and claims 12, 17 and 18 were rejected on the patent to Heaton, British, 5560 of 1892, for a process consisting of placing an alloy of 80% tin and 20% aluminum on the adjacent portions of the metal [fol. 225] to be soldered and then distributing the solder by means of a heated brass rod in the same manner and for the same purpose as an ordinary copper soldering iron is used to distribute lead solder on tinned metal. Applicant's claims are distinguished from the reference in that a tin-aluminum solder is not utilized and that no soldering iron is used. Applicant's alloy is of such a nature that it automatically distributes itself on the surface of the metal parts and the step of distributing the metal with a soldering iron is not necessary. In applicant's process in which a phosphorus copper alloy of substantial eutectic composition is utilized, at least one of the steps of ordinary soldering is omitted. The discovery of a method of soldering whereby the flux and the soldering iron are both dispensed with is a material advance in the art and it is be-

lieved that the claims set forth patentable subject-matter that is clearly allowable over the reference.

Claims 8, 10, 11, 13 and 14 were rejected on patent 1,103,482 to Canzler which recites that copper phosphorus has hitherto been used as a flux or reducing agent in connection with the process of *welding* copper. The patent does not recite which alloy of copper was used for that purpose. The use described is that of *welding* copper and is clearly distinguishable from the use which applicant has discovered; namely that of *soldering* copper.

The patent recites that the copper phosphorus was used as a reducing agent. The disclosure does not indicate that [fol. 226] the phosphorus copper alloy which the patentee may have had in mind, but, did not describe, was useful as an alloy. The patentee did not discover or disclose that any kind of phosphorus copper alloy was suitable for solder. Applicant's discovery refers to certain specific alloys of phosphorus and copper, and the operation of the alloy with respect to its properties as a flux or deoxidizer is only incidental and contributory to the successful utilization thereof.

Claims 8 and 10 are rejected on patent 989,573 to Dandelein and French patent 417,307. The French patent describes precisely the same composition of metal as the Dandelein patent, the only distinction being that the composition described in the French patent contains a flux. The French patent is not pertinent to applicant's claims as no flux is recited therein.

The Dandelein patent describes the composition of seven metals of which only copper, lead, tin, and zinc appear to be the constituents which impart the character of solder to the composition. Phosphorus, silver and aluminum are present merely as deoxidizers for the alloy or merely as impurities. It is not within the spirit or scope of applicant's claims to include an alloy of copper and phosphorus which is present as an impurity.

It is believed that the claims as formerly presented did not expressly or impliedly recite a solder having an insignificant proportion of copper phosphorus alloy such as that described in the reference. In order, however, to [fol. 227] definitely dispel further uncertainty, claims 8 and 10 have been amended to recite that the solder contains phosphorus and copper as the main and essential constituents thereof. The claims clearly distinguish from

the references which describe a composition containing phosphorus merely as an impurity.

Reconsideration and allowance of the claims are requested.

Paper No. 14 November 30, 1926

Rejection

Responding to amendment filed Aug. 24, 1926.

Claims 7, 8, 9, 10, 15 and 16 are allowed.

Claims 1 to 6 inclusive, claims 12 and 17 are rejected because they involve nothing more than the ordinary method of soldering. They are also considered to lack invention over Heaton 5560 of record.

Claims 11, 13, 14 and 18 are rejected on the art of record which shows solders containing copper and phosphorus to be old.

Since a definite issue has been reached, and this is a very old case, this action is made final.

A.G. A. Lindsey, Examiner Div. 3.

Paper No. 15 April 27, 1927

Amendment "F"

Acknowledging the Examiner's letter of November 30, 1926, I hereby amend the above-entitled application as follows:

[fol. 228] Cancel claims 1 to 6, inclusive, 11, 12, 13, 14, 17 and 18.

Remarks:

As the finally rejected claims have been cancelled and the remaining claims have been allowed, this application is in condition for allowance.

The Examiner is requested to renumber the allowed claims as 1 to 6 in the following order:—10, 7, 8, 9, 15 and 16.

Notice of Allowance

May 6, 1927

Six Claims

Paper No. 16 October 13, 1927

Amendment "G"

The Examiner is requested to amend the above-entitled application as follows, under the provisions of Rule 78:

Specification amended as indicated on patent.

Remarks:

Certain changes have been made in the specification in order to make the sentences read clearly.

Paper No. 17 October 15, 1927

Notice of Entry

The amendment proposed has been entered under Rule 78.

Thomas E. Robertson, Commissioner of Patents.

Final Fee $20.00—November 7, 1927

London.

the strength of chill castings of the metal increases rapidly from about 6 tons per square inch (9½ kg. per square mm.) to 11 tons per square inch (17½ kg. per square mm.) when 5 per cent. of copper is present, and then more slowly to nearly 15 tons per square inch (23½ kg. per square mm.) with 20 per cent. of copper. The ductility drops continuously from about 18 per cent. for pure aluminium to 8 per cent. when 5 per cent. of copper is present, and to nearly zero with 20 per cent. of copper.[136] It is not advisable to use more than 5 per cent. of copper. By rolling or drawing the strength may be raised to 20 tons per square inch (31½ kg. per square mm.).[137] A recent alloy, of which the composition is about aluminium 95, copper 3·5, iron, silicon, and manganese 0·5 per cent. each, when in the form of sheets and wires has a tenacity of 25 to 40 tons per square inch (39½ to 63 kg. per square mm.), and a ductility of 20 to 3 per cent.; the alloy is said to take a good polish, and to resist corrosion well.

Aluminium Bronze is a useful substitute for other bronzes and for brasses in circumstances where strength combined with fair ductility is required, and where steel is unsuitable, as in the case of pump-rods, valve spindles, eccentric straps, etc. It is especially useful at high temperatures, since its strength decreases but slowly as the temperature is raised, the tenacity of the 90 per cent. alloy at 300° C. (572° F.) being about 33 tons per square inch (52 kg. per square mm.). The drawn alloys are not infrequently used for springs. On account of its fine golden-yellow colour and untarnishable surface the 90 per cent. alloy is largely utilised for cheap jewellery under the name of **Aluminium Gold** and other more fanciful titles. The aluminium-rich alloys are used as castings, stampings, sheets, and bars in automobile and aëronautical work. They are also employed for cooking utensils and kindred appliances. Iron and silicon are always present in small quantities in the commercial alloys. The most useful additional metals are manganese and nickel.

82. **The Copper-Phosphorus Alloys.**—The diagram for these alloys (Fig. 212) has been traced as far as 15 per cent. of phosphorus[138]; on account of the volatility of this element, alloys containing much more than 15 per cent. can be prepared only in closed vessels. There is a compound Cu_3P, containing 14 per cent. of phosphorus by weight, which melts at about 1,020° C. (1,868° F.) and forms with copper an eutectic containing 8·2 per cent. of phosphorus, melting at 707° C. (1,305° F.). The compound separates pure from the liquid alloys, but it is slightly dissolved by copper, the maximum concentration of the solution being 0·175 per cent. of phosphorus. Alloys containing less than 8·2 per cent. of phosphorus consist of primary crystals of nearly pure copper in a matrix of eutectic: in alloys containing between 8·2 and 14 per cent. the primary crystals are of Cu_3P. The eutectic has a well-defined

laminated structure. The compound Cu_3P is grey in c… brittle; it is nearly as hard as hardened tool steel. The…

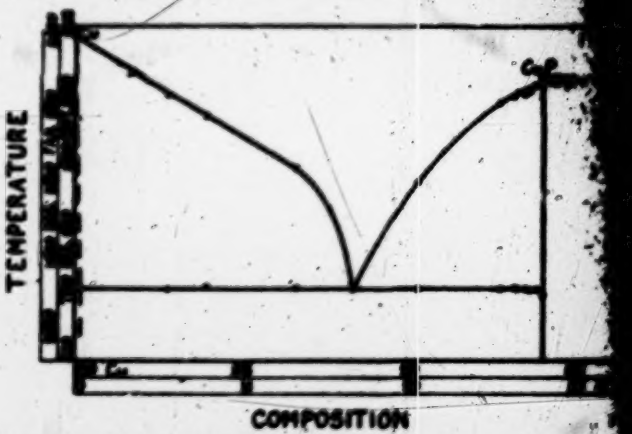

Fig. 212.—Equilibrium diagram for copper-phosphorus alloys (Heyn & Bauer).

intermediate in hardness between structural steel and annea… steel—very much harder than copper.

Phosphor-copper containing about 8 to 10 per cent. of phosph… used for making **Phosphor Bronze**, the properties and uses of… have been described already.

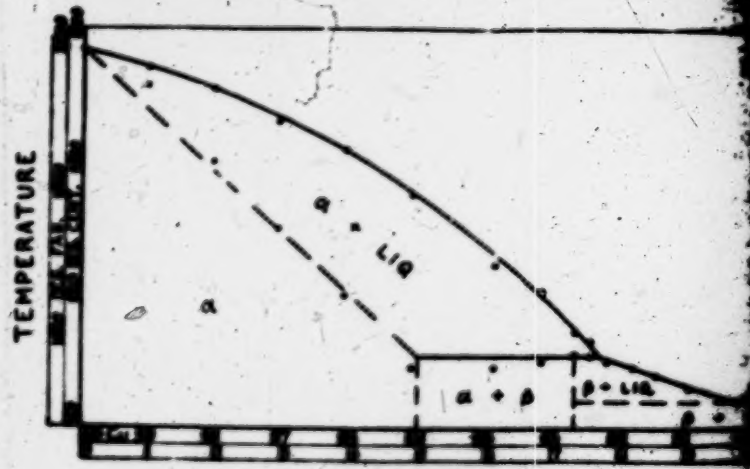

Fig. 213.—Equilibrium diagram for copper-silicon alloys (Rudd…

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DEFENDANT'S EXHIBIT L.

WESTINGHOUSE
ELECTRIC & MANUFACTURING COMPANY

EAST PITTSBURGH, PA.

July 11, 1940

Mr. A.R. MacGregor
Alloy Specialties Co.
Swissvale, Pa.

Dear Mr. MacGregor:

Confirming our conversation with you today, we are handing you herewith copies of our revised User Price List 26-820, pages 1 and 2, and Distributor Price and Discount Sheets 26-826, pages 1, 2 and 3. These modified price and discount sheets are to be made effective August 1, 1940.

In connection with this price form you of course understand your obligation to observe and follow these prices, terms, and conditions of sale established by Westinghouse in accordance with the provisions of paragraph 5 of our license agreement with you dated November 16, 1937. These prices are minimum and discounts are maximum and neither is to be bettered either directly or indirectly in any manner whatsoever.

You also understand that square rod is to take the same price as material furnished in rounds and that the minimum dimension of the square determines the price. For example, a square rod measuring one eighth inch on each side is to take the price of round material one eighth inch in diameter.

Yours very truly,

J. B. Seastone, Manager
TENDER ENGINEERING DEPARTMENT

JBS-TMB

RECEIVED
JUL 12 1940
WILLIAM B. J. SPERI

WESTINGHOUSE—THE NAME THAT MEANS EVERYTHING IN ELECTRICITY

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WESTINGHOUSE SPECIAL ALLOYS

"Phos-Copper"

"Phos-Copper" is a brazing alloy composed of phosphorus and copper. It is used for brazing joints in copper, brass, and copper alloys.

"Phos-Copper" melts at 707°C (1304°F), a temperature that can easily be obtained in an electric furnace, with an oxy-acetylene torch, incandescent brazing, or by carbon arc. It becomes fluid at 760°C (1382°F) and extremely liquid at 850°C (1526°F) which is approximately the same as the liquid temperature of other commercial brazing alloys. This temperature is well below the melting point of copper.

"Phos-Copper" is more economical to use than silver solder because of its first cost. In addition, "Phos-Copper" offers the following advantages:

(1) Only a small quantity is needed on tight fitting joints. No filling is necessary. In fact, best results are obtained when only a thin film is used.

(2) "Phos-Copper" has a low melting point, is quick-flowing, and penetrates deeply. This means "Phos-Copper" is easy to use and quick-working, thereby saving labor in the brazing operation.

(3) When joining copper to copper with "Phos-Copper" no flux is necessary, this means labor is saved in the cleaning and finishing of completed joints.

Style No. of Standard Package	No. of Lbs. in Std. Pkg.	Sizes	Approx. No. of Rods per lb.	User Prices per Pound: 1 to 9 lb.	10 to 24 lb.	25 to 99 lb.	100 to 249 lb.	250 to 499 lb.	500 to 999 lb.	1000 to 2499 lb.	2500 & over
946 414	10	1/16"Round x 36"Long	28	$2.85	$2.55	$2.00	$1.88	$1.72	$1.62	$1.54	$1.49
970 234	10	3/32"Round x 36"Long	16	2.70	2.20	1.95	1.78	1.60	1.50	1.42	1.36
946 386	25	1/8 "Round x 36"Long	8	1.95	1.70	1.50	1.35	1.18	1.05	.96	.88
946 411	25	5/16"Round x 36"Long	3-1/2	1.88	1.65	1.45	1.28	1.11	.98	.88	.81
946 412	25	1/4 "Round x 36"Long	2	1.75	1.48	1.28	1.11	.96	.85	.75	.67
*942 450	10	0.015"Thick x 1.25"+	16 ft./lb	3.80	3.25	3.00	2.90	2.85	—	—	—

*Strip Ribbon Furnished in Random Lengths (Coiled). Width of ribbon in different coils may vary from 1-1/4" to 1-1/2". Width within a coil will not vary more than ± 1/16"; sides are parallel.

REFER TO THE NOTES for prices of ribbon trimmed to exact width of 1/2", 5/8", 1", and 1-1/2"

Assortments: Prices to the user are determined by the aggregate weights on individual orders, authorized for unit shipment to one destination. Assortments of sizes of material to make up a weight in order to determine price are permissible. For example, an order for 25 pounds of 1/8" round x 36" long "Phos-Copper" brazing alloy and 75 pounds of 1/4" round x 36" long "Phos-Copper" brazing alloy authorized for unit shipment to one destination will be priced at the specified 100 to 249 pound price for each size.

Terms: Net 30 days.

Delivery: F.O.B. East Pittsburgh.

WESTINGHOUSE SPECIAL ALLOYS

"Phos-Copper"

"Phos Copper" is a brazing alloy composed of phosphorus and copper It is used for brazing joints in copper brass and copper alloys

"Phos-Copper" melts at 707°C (1304°F), a temperature that can easily be attained in an electric furnace, with an oxy acetylene torch, incandescent brazing, or by carbon arc. It becomes fluid at 750°C (1382°F) and extremely liquid at 830°C (1526°F) which is approximately the same as the liquid temperature of other commercial brazing alloys This temperature is well below the melting point of copper.

"Phos Copper" is more economical to use than silver solder because of its first cost In addition, "Phos Copper" offers the following advantages:

(1) Only a small quantity is needed on tight fitting joints. No filling is necessary In fact best results are obtained when only a thin film is used.

(2) "Phos-Copper" has a low melting point, is quick-flowing, and penetrates deeply This means "Phos Copper" is easy to use and quick-working, thereby saving labor in the brazing operation

(3) When joining copper to copper with "Phos-Copper", no flux is necessary this means labor is saved in the cleaning and finishing of completed joints

Style No of Standard Pkgs.	No of Lbs. in Std. Pkg.	Sizes	Approx. No. of Rods Per Lb.	User Prices per Pound 1 to 9 lbs.	10 to 24 lbs.	25 to 99 lbs.	100 to 249 lb.	250 to 499 lb.	500 to 999 lb.	1000 to 2499 lb.	2500 & over
946 414	10	1/16"Roundx36"Long	28	$2 85	$2 35	$2 00	$1 85	$1 72	$1 62	$1 54	$1 49
970 234	10	3/32"Roundx36"Long	16	2 70	2 20	1 95	1 75	1.60	1 50	1 42	1 36
946 386	25	1/8 "Roundx36"Long	8	1 95	1 70	1 50	1 33	1 18	1 05	95	.38
946 411	25	3/16"Roundx36"Long	3-1/2	1 83	1 63	1 43	[illegible]	1 11	96	88	.81
946 412	25	1/4 "Roundx36"Long	2	1 73	1 48	1 28	1 11	96	83	73	.67
*942 130	10	0 015"Thickx.25"x 16ft /lb		3 80	3 25	3 00	2 90	2.85			-

* Strip Ribbon Furnished in Regular Tempers (Rolled) Width of ribbon in different coils may vary from

REFER TO THE WORKS for prices of ribbon trimmed to exact width of 1/2", 5/8", 1", and 1-1/2".

Assortments: Prices to the user are determined by the aggregate weights on individual orders, authorized for unit shipment to one destination. Assortments of sizes of materials to make up a weight in order to determine price are permissible. For example, an order for 25 pounds of 1/8" round x 36" long "Phos-Copper" brazing alloy and 75 pounds of 1/4" round x 36" long "Phos-Copper" brazing alloy authorized for unit shipment to one destination will be priced at the specified 100 to 249 pound price for each size.

Terms: Net in 30 days.

Delivery: F.O.B. East Pittsburgh.

Discounts: The following distributor discounts will apply, subject to the paragraph on "Assortments" given below:

Quantity	Discount	Multiplier
1# - 249#	20%	80
250# .. 499#	21%	79
500# .. 999#	22%	78
1000# .. 2499#	23%	77
2500# & over	24%	76

This Discount Sheet is to be used only with duly authorized and appointed Distributors who buy "Phos-Copper" brazing alloy only for resale purposes and who with respect to such alloy have signed an agreement in the form of 18349, Sheets 1 and 2. These are maximum discounts and shall not be bettered either directly or indirectly in any manner whatsoever.

Assortments: Prices and discounts to the distributor are determined by the aggregate weights on individual orders authorized for shipment at one time. Assortments of sizes of material to make up a weight in order to determine price and discount are permissible. For example, an order for 200 pounds of 1/8" round x 36" long "Phos-Copper" brazing alloy and 300 pounds of 1/4" round x 36" long "Phos-Copper" brazing alloy authorized for shipment at one time will be priced at the specified 500 to 999 pound price for each size, with the corresponding (22%) distributor discount.

Conditions The property in and title to the Building Products herein purchased, and any replacement thereto or substitutes therefor, shall not pass from the Company until all payments due hereunder (including deferred payments and payments of notes and renewals thereof if any) and the payments of any judgments thereon, shall have been fully made in cash (in case notes or trade acceptances are accepted they shall be mere evidence of indebtedness and not payment and if not paid when due, all outstanding notes shall, at the option of the holder, become immediately due and payable). Delivery of Building Products and renewal of notes hereunder, if any, are contingent upon the purchaser's financial condition being at all times satisfactory to the Company

DEFENDANT'S EXHIBIT O. 154

A. R. MacGREGOR
P. O. Box 8274
Swissvale, Pa.

March 1, 1943

Statement of royalties paid to W.E. & M. Co. up to and including the third quarter of 1940 on Alloy No. 1300 and Phos-Copper Alloy.

Date Paid	Amount Paid	Period
1-31-38	$ 111.71	Fourth quarter of 1937
10-28-38	139.41	First quarter of 1938
1-31-39	467.42	Second and third quarters of 1938
5-4-39	266.79	Fourth quarter of 1938
6-21-39	300.00	First quarter of 1939
7-14-39	266.37	First quarter of 1939
8-11-39	463.15	Second quarter of 1939
11-6-39	486.65	Third quarter of 1939
5-24-40	595.02	Fourth quarter of 1939
6-29-40	144.78	First quarter of 1940
7-31-40	108.23*	First quarter of 1940
8-14-40	200.00*	First quarter of 1940 -- Bank note
9-9-40	500.00	First and second quarters of 1940
10-14-40	200.00*	Second quarter of 1940 - Bank note
10-29-40	1148.54	Third quarter of 1940
11-12-40	200.00	Balance of 2nd Qtr. of 1940 and addition due to audit. Bank note
12-12-40	200.00	Addition due to audit. Bank note
1-13-41	200.00	Addition due to audit. Bank note
2-13-41	200.00	Addition due to audit. Bank note
	23.76	Interest paid on the six $200.00 notes
Total	6181.83	
Less	128.06	Allowance for royalty paid on Jones (Phos-Copper) alloy.
Net	$6053.77	

*We have all cancelled checks except those marked thus (*).

The following is a statement of royalties paid on Jones (Phos-Copper) alloy in addition to above since the third quarter of 1940.

Date Paid	Amount Paid	Period
3-26-41	$ 366.32	Fourth quarter of 1940
4-28-41	298.00	First quarter of 1941
7-29-41	123.80	Second quarter of 1941
10-29-41	256.88	Third quarter of 1941
1-30-42	66.88	Fourth quarter of 1941
Total	$1111.88	

Note: No Jones (Phos-Copper) alloy has been sold since the fourth quarter of 1941

Signed J. E. MacGregor, Auditor.

[fol. 238] PLAINTIFF'S EXHIBIT 5

Memorandum
To Mansfield Works — Date 8/24/33
Dept. Appliance Engr. — Mr. Wm. Layton

SIL-FOS

DEAR BILL

I have your note of 8/23, and we have an M#—6806 covering Sil-Fos which we took out—with considerable misgivings, for Springfield.

Your request, indicating an intention to use the material, is a great disappointment to us and we appeal to you to do everything you can to stop the use of it.

Any use that Westinghouse makes of Silfos weakens our position considerably inasmuch as our Legal Dept. and Sales Dept. have considered efforts toward stopping Handy & Harmon. Just how successful they will be we don't know yet, but any use we make of it at this time would seem to strengthen their position and weaken our own.

We at East Pittsburgh are sore about this whole thing and the development of Silfos we interpret as an out and out steal on our Phos-Copper.

The whole thing came about in this way:

About four years ago, in the development of our rolling procedures for Phos-Copper, we sent some billets to Handy [fol. 238a] & Harmon with a requisition for them to roll them down to a given size. We wanted to see what kind of a rolling job they could do. And they did a good job of it, but in the meantime they must have been inquisitive about the properties of the material, because shortly afterward their president came on to E. Pgh. and he wanted an agreement made whereby they could make and sell our phos-copper.

After the matter was considered by our Sales and Legal departments, he was finally turned down. Within a year from this time they came out with Sil-Fos.

It is obvious that they were attracted by our Phos-Copper and that their material is simply a development to get around our patents.

As to the material itself you know as well as any of us that an alloy of silver and copper does not make a brazing alloy. Their material does the job not because it contains

silver, but because, and only because it contains phosphorus. The silver is only so much camouflage. It contributes no valuable property—its only value—to the benefit of H & H —is that it slightly lowers the beginning of the melting range just enough to get around our claims. And who cares about a few degrees lower melting range when a joint is being made?

The material is just as brittle as phosphor copper although in the joint, we have to admit it is just as good.

We do claim however, that phos-copper will work just as well in any place where Silfos will work and if the same [fol. 238b] amount of unbiased effort is exerted toward the use of phos-copper as is exerted on Silfos, equally good results are obtained.

And purchases of phos-copper means work for Westinghouse. Under the conditions it seems like "adding insult to injury" when other members of the Westinghouse family take potential work away from our own and hand it over to a competitor.

Can't we have your support in putting phos-copper across on these jobs?

A. R. MacGregor.

DEFENDANT'S EXHIBIT K

April 1, 1941

Westinghouse Electric & Mfg. Company
East Pittsburgh, Pa.

Re Jones Patent #1,651,709

GENTLEMEN:

Because of your assertion that the copper phosphorus silver alloy manufactured by Mr. A. R. MacGregor is covered by the Jones patent, and because of your demand that he make payment of royalties for the sale of this alloy, under license dated November 16, 1937, he has referred the matter to me for an opinion, copy of which is herewith enclosed.

I wish to particularly direct your attention to the Conclusion, beginning page 8 of the opinion, which is to the effect [fol. 238c] that the Jones patent must be specifically restricted to cover an alloy of copper and phosphorous only, and that the silver alloy cannot be brought within the pur-

view of the Jones patent. In the paragraph beginning at the bottom of page 8 and under the heading Conclusion, there is the further statement that the Jones patent does not cover an alloy of copper, phosphorus and tin. If the conclusion as to the silver alloy is correct, then, obviously, it is equally true that the Jones patent does not cover copper phosphorus tin alloy, and on this premise I have advised Mr. MacGregor that the royalties paid since November 1937 for copper phosphorus tin alloys manufactured and sold by him have been paid in error.

I am enclosing a statement of royalties paid under the license to date, totalling $6524.40, against which is credited the sum of $494.76 which represents royalties paid for the manufacture and sale of copper phosphorus alloy coming under the Jones patent.

Under the circumstances, no royalty payments will be made in the future for any alloys other than the straight copper phosphorus alloy coming under the Jones patent, and it is requested that you repay my client the sum of $6029.64, which is the net amount of the royalties that he has, in the past, erroneously paid for alloys which do not fall within the scope of the Jones patent.

Yours very truly, William B. Jaspert.

WBJ:S.

[fol. 239] In Court of Common Pleas

Adjudication, Findings of Fact, Discussion, Conclusions of Law, Order of Court—Filed July 7, 1943

Soffel, J.

This is an action in assumpsit in which the plaintiff seeks to secure from the defendant an accounting and payment of royalties alleged to be due under a patent license contract. The case was tried without a jury. Both plaintiff and defendant submitted requests for Findings of Fact and Conclusions of Law. In accord therewith, the Court makes the following

Findings of Fact

I. As Requested by the Plaintiff:

1. Plaintiff, Westinghouse Electric and Manufacturing Company is a corporation of Pennsylvania, has its prin-

cipal office and place of business in Allegheny County, and is the owner of Jones Patent No. 1,651,709, issued December 6, 1927. Alpine R. MacGregor, the defendant, is a resident of Allegheny County.

2. On November 16, 1937, the parties to this suit entered into a license agreement (Plaintiff's Exhibit 2) under which plaintiff-licensor granted defendant-licensee a non-exclusive license to make, use and sell brazing solders embodying the inventions covered by Jones Patent No. 1,651,709, dur- [fol. 240] ing the term of said patent. By that contract defendant agreed, in effect, to pay plaintiff a royalty of 10% of his sales price upon solder made and sold by him and embodying the inventions covered by the patent, agreed to render quarterly reports showing the quantity of licensed solder sold, agreed to permit licensor to examine his books, and agreed (Clauses 5 and 6) not to sell the licensed solder on terms more favorable to his customers than those of Westinghouse for similar or competing solder under the patent to its customers purchasing in like quantities. Clauses 5 and 6 provide as follows:

> 5. Westinghouse grants this license on the express condition that the prices, terms and conditions of sale for use or sale in the United States of America, its territories and possessions of brazing solders embodying the invention covered by said Letters Patent and so long as such brazing solders continue to be covered by said patent, shall be no more favorable to the customer than those which from time to time Westinghouse establishes and maintains for its own sales of similar or competing brazing solders under such patent to such or other similarly situated customer purchasing in like quantities. MacGregor shall be notified of all such prices, terms and conditions of sale fixed by Westinghouse.
>
> The prices, terms and conditions of sale of Westinghouse may be changed by Westinghouse from time to [fol. 241] time, notice being given MacGregor, but not less than five days' notice shall be given before any such change shall go into effect.
>
> 6. It is agreed that it shall be regarded as an evasion of this agreement amounting to a breach thereof for MacGregor to reduce Westinghouse's sale price

or alter Westinghouse's selling terms and conditions of sale directly or indirectly either through its own organization, its agents or others by any device, subterfuge or evasion or by any means whatever or to make the prices lower or the terms or conditions more favorable than those set forth by Westinghouse.

3. Prior to May 31, 1931, MacGregor was in the employ of Westinghouse. There he learned the composition and uses of the patented solder as manufactured and used by Westinghouse. That solder comprised 93% copper and 7% phosphorus.

4. Shortly after leaving the employ of Westinghouse, MacGregor commenced the manufacture and sale of a solder comprising 92.25% copper, 7.25% phosphorus and .5% tin. This solder has been sold continuously since then by MacGregor as his "No. 1300." So far as possible proportions of the ingredients of that solder have been kept uniform, and no intentional variation therein has been made.

5. March 31, 1937, Westinghouse brought suit against MacGregor in the United States District Court at Pitts-[fol. 242] burgh charging infringement of the Jones patent by the said solder then being made by MacGregor.

6. MacGregor took the license involved in this suit to settle the said infringement suit.

7. Subsequent to taking the license of November 16, 1937, MacGregor continued to make and sell the copper-phosphorus-tin solder he had been making theretofore, marked it as coming under the Jones patent, and until 1941 paid royalty on that solder to the amount of $6,053.77.

8. Sometime after the execution of the license agreement, at a date not shown by the record, MacGregor commenced making and selling a solder comprising 90.5% copper, 7.5% phosphorus, and 2% silver. This was sold as his "No. 1270". So far as possible there has been no variation in the composition of this solder up to the present.

9. Westinghouse demanded payment of royalty on the copper-phosphorus-silver solder. MacGregor replied on April 1, 1941, by refusing to pay royalty thereon, and thereafter refused to pay royalty on the copper-phosphorus-tin solder. Since then he has not reported to West-

inghouse his sales or paid royalties upon either the copper-phosphorus-tin or copper-phosphorus-silver solder.

10. After taking the said license, MacGregor made and sold solder comprising 93% copper and 7% phosphorus. His payment of royalty on that solder extended through-[fol. 243] out the year 1941. A payment was made as late as January 30, 1942.

11. There has been no termination of the license agreement by action of the parties or otherwise.

12. Defendant, MacGregor, testified in this case that he now regards the license agreement as in full force and effect, and that he respects his obligations thereunder in so far as the said copper-phosphorus solder is concerned.

13. MacGregor's copper-phosphorus-tin solder commences to melt at 705° C, is completely fluid at 822° C, and is used for soldering at some temperature above 822° C.

14. MacGregor's copper-phosphorus-silver solder, commences to melt at 685° C, but is not entirely melted below 800° C, and is used for soldering at a temperature above 800° C.

15. There is no noticeable difference in operating results in soldering with plaintiff's patented solder as made and sold by Westinghouse and the copper-phosphorus-tin and copper-phosphorus-silver solders as made and sold by MacGregor. They are used and are interchangeable for the same purposes, by the same customers, for the same jobs.

16. The copper-phosphorus-tin solder, and the copper-phosphorus-silver solder made by MacGregor are hard solders. Hard solders are recognized in this art as different [fol. 244] materials from soft solders. Hard and soft solders are not interchangeable in use, are used for different purposes, and melt at comparatively high and low temperatures, respectively.

17. All of the prior art patents and publications introduced in evidence by MacGregor, except defendant's Exhibit I, were cited by the Patent Office in its examination of the application upon which the Jones Patent was allowed. Defendant does not rely on Exhibit I for any purpose.

18. Daudelin patent No. 989,573 of 1911 (Defendant's Exhibit B) disclosed a soft solder. Copper and phosphorus

are minor constituents, copper being 3% and phosphorus less than 1% of the solder. It does not teach or suggest a solder in which copper and phosphorus are the main and essential constituents as described and claimed in the Jones patent.

19. Canzler prior art patent No. 1,103,482 (Defendant's Exhibit C) issued July 14, 1914, disclosed a welding alloy in which phosphorus was used as a reducing agent to prevent oxidation of copper during the welding process. The amount of phosphorus considered necessary in 1914 to prevent oxidation in the welding of copper was less than 1% of the welding alloy. There is nothing in the Canzler patent that suggested the making of a solder, or that teaches any purpose or advantage in using phosphorus in an alloy of copper-phosphorus or copper-phosphorus-silver to an extent greater than 1% of the total alloy.

[fol. 245] 20. Maxon patent No. 532,890 of 1895 (Defendant's Exhibit D) disclosed a soft solder. Copper is a minor constituent, amounting to 6.6%. It does not teach or suggest a solder that would be usable for the same purposes as that described and claimed in the Jones patent.

21. British patent No. 5560 of 1892 (Defendant's Exhibit F) discloses a solder that contains neither copper nor phosphorus.

22. French patent No. 417,307 of 1910 (Defendant's Exhibit G) discloses a soft solder. Neither copper nor phosphorus appears to be a main and essential constituent of this solder. Copper is less than 3% and phosphorus less than ½% of the solder. This patent calls for lead, tin, and zinc in proportions greatly in excess of copper. Lead, tin and zinc are clearly the main constituents of the solder.

23. Gulliver's "Metallic Alloys" of 1913 (Defendant's Exhibit H), is an extract from a book on alloys. The pages in evidence refer to copper-phosphorus alloys generally. They state that a copper-phosphorus eutectic containing 8.2% phosphorus melts at 707° C. There are no suggestions or teaching in this exhibit of a solder made from copper and phosphorus, or that such an alloy could be used, or would be useful as a solder.

24. Brant's "The Metallic Alloys" of 1896 (Defendant's Exhibit I) refers to hard solders containing precious metals

[fol. 246] such as gold and silver. The exhibit contains no reference to a solder comprising copper or phosphorus. This reference is not relied upon by defendant for any purpose.

25. The file history of the Jones Patent (Defendant's Exhibit A) shows that Jones did not claim that he had invented a copper-phosphorus alloy per se. What he described as his invention was the discovery that a copper-phosphorus alloy in which the phosphorus was preferably between 6 and 9% of the total, makes a solder that has advantages over the solders that had been known and used in the prior art for the purpose for which his new solder is adapted.

26. MacGregor in his testimony, although claiming to have been familiar with the practical art since 1914, admitted the usefulness of the Jones solder, that he knew of no such solder in the prior art before the Jones Solder, and that he learned of it during his employment at Westinghouse.

27. Under date of July 11, 1940, Westinghouse sent MacGregor a letter (Defendant's Exhibit L) inclosing copies of its "User Price List", and its "Distributor Price List", and called attention to MacGregor's obligation under paragraph 5 of the license agreement to observe the prices, terms, and conditions established by Westinghouse in its sale of the patented solder.

28. On August 12, 1940, counsel for MacGregor wrote Westinghouse that he regarded as illegal its requirement [fol. 247] that MacGregor "establish a user price per pound in addition to the original sales price or dealer price", and that he could not advise MacGregor "to even attempt to enforce such a price schedule."

29. On October 23, 1940, Westinghouse, through one of its attorneys, wrote counsel for MacGregor, referring to an interview on August 15, 1940, stating in effect that there had never been any intention to "establish a user price per pound in addition to the original sales price or dealer price" for the same solder, and that "if MacGregor sells direct to the user, he should conform to the user prices established, and when he sells direct to the dealer, he should conform to the dealer prices established."

30. MacGregor was never required under the license contract or otherwise to fix resale prices on licensed solder sold by him.

31. Payments made by MacGregor on his copper-phosphorus-tin solder were not made under any mistake of fact. All the facts bearing on the scope of the Jones patent shown by this record were known, or could have been ascertained, by MacGregor at the time he took the license and during the time he paid royalty thereunder.

[fol. 248] II. As Requested by the Defendant

1. Plaintiff, Westinghouse Electric and Manufacturing Company, is a corporation of Pennsylvania, has its principal office and place of business in Allegheny County, and is the owner of Jones Patent No. 1,651,709, issued December 6, 1927. Alpine R. MacGregor, the defendant, is a resident of Allegheny County.

2. On November 16, 1937, the parties to this suit entered into a license agreement (PX-2) under which defendant was granted the non-exclusive license to make, use and sell brazing solders covered by Jones Patent No. 1,651,709 for a royalty of ten percent of the selling price, the license providing, paragraphs numbered 5 and 6 thereof, that defendant's selling prices shall be no more favorable than those established and maintained by Westinghouse Electric and Manufacturing Company for its own sales under the patent to such or other similarly situated customers purchasing in like quantities, and that the reduction of Westinghouse Electric and Manufacturing Company's sales price or alteration of Westinghouse's selling terms and condition of sale directly or indirectly would be regarded as an evasion and breach of the license.

3. In pursuance to paragraphs 5 and 6 of the license agreement and because it was necessary under the license agreement that Westinghouse Electric and Manufacturing Company notify MacGregor of its prices in order that he [fol. 249] may follow them, Westinghouse furnished MacGregor two price schedules entitled "User Price List 26-280" and "Distributor Price List 26-826".

4. Prior to April 1, 1941, and after execution of the license agreement, Westinghouse Electric and Manufacturing Com-

pany demanded of MacGregor payment of royalty under the license agreement for a solder comprising copper phosphorus and silver, which payment was refused by MacGregor, and on April 1, 1941, MacGregor notified Westinghouse that the royalty he had been paying on the copper phosphorus and tin alloy, amounting to $6053.77, was paid by mistake of fact, and demanded of Westinghouse Electric and Manufacturing Company repayment of this sum.

5. MacGregor is the owner of United States Letters Patent No. 2,125,680 granted August 2, 1938 for the solder containing copper phosphorus and tin and Patent No. 2,162,627 granted June 13, 1939, for the solder containing copper phosphorus and silver covering the alloys herein charged by the plaintiff to come within the terms of the license and for which plaintiff is herein seeking an accounting (as stated in the pleadings.)

6. The Jones Patent No. 1,651,709 describes a solder of copper and phosphorus containing less than 10% of phosphorus and describes the eutectic alloy of 8.27% phosphorus and the remainder copper which melts at about 707° C as especially suitable for brazing copper or copper [fol. 250] alloys; the patent further states that a phosphorus copper alloy which contains from 6 to 9% phosphorus is suitable for brazing the bars and end rings of rotors for induction motors.

7. The file history of the Jones Patent No. 1,651,709 shows that the original claims filed in the United States Patent Office were for a solder comprising an alloy of copper and phosphorus containing less than 10% of phosphorus; a solder comprising an alloy of copper and phosphorus containing about 6 to 9% phosphorus; a solder comprising a eutectic alloy of copper and phosphorus containing 8.27% phosphorus which melts at 707° C, which are for copper phosphorus soldering alloys described in the patent specification.

8. The publication of 1913 by Gulliver entitled "Metallic Alloys", under the heading "Copper Phosphorus Alloys" describes the eutectic as containing 8.2% phosphorus, melting at 707° C and discloses in a curve, Fig. 212, that copper phosphorus alloys containing from 5 to 10% phosphorus melt at from 700 to 900° C, and that the eutectic having an approximately 8.2% phosphorus content melts at 700° C.

9. The file history of the Jones Patent No. 1,651,709 shows that the original claims for the alloy disclosed by the Jones patent were rejected and cancelled on the publication by Gulliver, and that the applicant admitted that the alloy described by the Jones patent was old but had never been used as a solder.

[fol. 251] 10. The MacGregor copper phosphorus tin alloy comprising 92.25% copper, 7.25% phosphorus and .5% tin comes within the copper phosphorus range of the original claims filed in the Jones application for solder containing less than 10% phosphorus or from 6 to 9% phosphorus, or the eutectic alloy of copper and phosphorus, which the file history of the Jones patent shows were cancelled.

11. The MacGregor copper phosphorus silver alloy comprising 90.5% copper, 7.5% phosphorus and 2% silver comes within the copper phosphorus range of the original claims filed in the Jones application for solder containing less than 10% or from 6 to 9% phosphorus, or the eutectic alloy of copper and phosphorus, which the file history of the Jones patent shows were cancelled.

12. Claim 1 of the Jones Patent No. 1,651,709 defining a brazing solder which consists of an alloy of substantially 6 to 10% phosphorus and the remainder copper includes the eutectic alloy containing about 8.27% phosphorus and the phosphorus copper alloy containing 6 to 9% phosphorus.

13. Claim 2 of the Jones Patent No. 1,651,709 defining brazing solder having a melting point between 700 and 900° C, containing phosphorus and copper as the main and essential constituents thereof, includes the eutectic alloy which melts at 707° C, the phosphorus copper alloy containing 6 to 9% phosphorus which melts between 700 and 900° C, and the alloy containing 10% or less of phosphorus which [fol. 252] melts between 700 and 900° C, as shown by the diagram of the Gulliver publication.

14. Claim 4 of the patent which defines a solder comprising copper and phosphorus as the main and essential constituents thereof, the ratio of copper to phosphorus in said solder being greater than 4 to 1, includes the eutectic alloy containing 8.27% phosphorus, the phosphorus copper

alloy which contains 6 to 9% phosphorus and the alloy containing 10% or less phosphorus described by the patent.

15. The method claims 5 and 6 of the patent cover a method of uniting objects of copper, which the defendant does not practice.

16. The patent to Canzler No. 1,103,482 discloses an alloy containing copper phosphorus and tin and copper phosphorus and silver, the ratio of copper to phosphorus being greater than 4 to 1.

17. The patent to Maxon No. 532,890 discloses a solder of copper silver phosphorus, and other ingredients.

18. The patent to Daudelin No. 989,573 discloses a solder containing silver phosphorus and copper and other ingredients.

[fol. 253] DISCUSSION

Westinghouse Electric & Manufacturing Company, a corporation, brought suit in assumpsit against Alpine MacGregor, defendant, to secure an accounting and payment of royalties alleged to be due under a patent license contract dated November 16, 1937 (plaintiff's Exhibit 2). By way of answer, the defendant seeks to have the patent declared invalid, the contract illegal and unenforceable, and to recover by counterclaim royalties already paid, and damages.

As an employee of the Westinghouse Company the defendant became familiar with the composition and uses of a copper-phosphorus solder made, used and sold by Westinghouse, and described in its Jones patent No. 1,651,709 (plaintiff's Exhibit 1). The Jones patent describes what is known as a "hard solder." Such a solder is used to fasten together metallic parts of electric motors and the like. Prior to the Jones invention it was customary to braze motor parts together by a solder consisting of copper and zinc in equal portions, which solder melted at 1000° C. The solder as made under the Jones patent comprised approximately 93% copper and 7% phosphorus. Jones discovered that a better solder could be made of copper and phosphorus by combining them in proportions so that phosphorus constituted between 6 and 9%. Such a solder had these advantages over the copper-zinc solder, to wit, it

melted at a lower temperature; it flowed more freely in [fol. 254] the spaces between the parts to be joined, it formed a more efficient joint.

On May 31, 1936 defendant left the employ of Westinghouse. Immediately thereafter he began to manufacture and sell a solder similar to that made by Westinghouse, except that he added one-half of one per cent of tin. Thereupon Westinghouse sued MacGregor in the United States District Court, charging infringement of its Jones patent. The infringement suit was dismissed by agreement, MacGregor taking the license here involved. Under the terms of that license, MacGregor agreed to pay a royalty of 10% of the sales price on solder made and sold by him which embodied the invention covered by the Jones patent. He agreed further to render quarterly reports showing the quantity of solder sold, and, in accord with such reports, to pay the royalty due. Westinghouse was given the right to audit MacGregor's royalty accounts.

At the time of the execution of the license MacGregor was making a solder comprising 93% copper and 7% phosphorus and was also making a solder composed of 92.25% copper, 7.25% phosphorus and .5% tin. He paid royalties under the license for a period of four years, amounting to more than $6,000.00. He marked the solders with a license patent number and allowed his royalty books to be examined.

Some time after the execution of the license contract, [fol. 255] MacGregor put on the market a solder comprising 90.5% copper, 7.5% phosphorus, and 2% silver approximately. When Westinghouse learned of this new solder it demanded payment of royalties and an examination of MacGregor's books to determine the amount of sales. MacGregor refused access to the books, and refused to pay royalties on this solder as well as upon the copper, phosphorus and tin solder. By way of counterclaim he demanded repayment of royalties that had been paid, alleging the payments were made by mistake.

This suit is brought to recover royalties upon MacGregor's copper-phosphorus-tin solder, as well as his copper-phosphorus-silver solder. It is admitted and conceded that the copper-phosphorus solder is covered by the license. Since the plaintiff has been denied access to MacGregor's books, an accounting is prayed for in order that subsequently the royalties due, if any, may be determined.

The instant action involves these questions:

(1) Is defendant's copper-phosphorus-tin solder within the scope of the Jones patent and therefore a licensed product?

(2) Is defendant's copper-phosphorus-silver solder within the scope of the Jones patent and therefore a licensed product?

(3) Has the defendant the right to attack the validity of the Jones patent under the recent *Sola v. Jefferson* decision of the United States Supreme Court because the license agreement contains a price-fixing clause?

[fol. 256] It is elementary patent law that claims in a patent define the patent invention.

Duff v. Forgie, 59 Fed. 772; U. S. 3rd C. C. A.
Thomson-Houston v. Elmira, 71 Fed. 396; U. S. 2nd C. C. A.

Claim 1 of the Jones patent covers a brazing solder consisting of an alloy of substantially 6 to 10 per cent phosphorus, the remainder of the solder being copper.

Claim 2 calls for a brazing solder having a melting point between 700 and 900° C and containing phosphorus and copper as the main and essential constituents thereof.

Claim 3 calls for a brazing solder consisting of phosphorus and copper and having a melting point between 700 and 900° C.

Claim 4 calls for a solder comprising copper and phosphorus as the main and essential constituents thereof, the ratio of copper to phosphorus being greater than 4 to 1.

Plaintiff argues that the evidence before the Court brings defendant's (a) copper-phosphorus-tin solder, and (b) copper-phosphorus-silver solder within claims 2 and 4 and in legal effect within the scope of claims 1 and 3, since the additional ingredients used by MacGregor do not change the uses and characteristics of the resulting solder substantially.

The MacGregor copper-phosphorus-tin solder, known as his "No. 1300", is composed of approximately 92.25% [fol. 257] copper, 7.25% phosphorus, and .5% tin. It mel-s between 700 and 900° C. The copper is more than 4 to 1 in ratio to the phosphorus. The main essential ingredients

are phosphorus and copper. The addition of .5% tin has no practical effect. Therefore this solder is not taken from under claims 1 and 3 of the Jones patent. MacGregor's tin solder is used for the same customers and for the same purposes as the Jones solder. There is no substantial difference in effectiveness or operative characteristics of the two solders.

It is well settled patent law that the addition of minor ingredients, not included in the claims, which do not change the characteristics or alter the functional effects of the patented composition, will not avoid infringement.

Crozier-Straub v. Graham, 28 F. (2d) 321, 325.
Lampus v. Crozier-Straub, 41 F. (2d) 746.

Immediately after leaving the Westinghouse Company on May 31, 1936, MacGregor began to manufacture his copper-phosphorus-tin solder. When sued in the United States District Court for infringement of the Jones patent, MacGregor chose to take the license involved in this case and paid royalties under that license in accord with its terms for a period of four years.

While the doctrine of estoppel might well be invoked against MacGregor, the Court is of the opinion that the copper-phosphorus-tin solder comes within the claims of the Jones patent and that there is evidence in the instant [fol. 258] case which establishes this fact.

Some time after the license herein was entered into MacGregor developed and began to market his copper-phosphorus-silver solder (No. 1270). The plaintiff demanded payment of the royalty thereon and MacGregor refused to pay on this silver solder and discontinued payment on his tin solder. The copper-phosphorus-silver solder differs from the copper-phosphorus-tin solder in that instead of adding .5% tin, MacGregor had added 2% silver to the Jones solder and increased the phosphorus to 7.5%. This change reduces slightly the point at which the resultant solder begins to melt, but it does not substantially change its characteristics, uses, or operative results as compared to the Jones solder made without silver. On evidence adduced at the trial the plaintiff's copper, phosphorus solder and defendant's copper-phosphorus-silver solder are interchangeable and sold in direct competition for the same uses by the same customers, and the advantages or disadvantages of 2% silver are inconsequential.

There is evidence which brings defendant's copper-phosphorus-silver solder within claims 2 and 4 and also claims 1 and 3 of the Jones patent. While it is true that there is testimony in behalf of the defendant that his silver solder melts outside the 700 to 900° range specified by claim 2 of the Jones patent, there is testimony that defendant's silver solder commences to melt at 685° but does not become fluid, [fol. 259] that is, completely melted, ready for use, until it has been heated to 800°.

The defendant attempts to justify his silver solder by the Canzler patent, U. S. Patent #1,103,482, issued in 1914 (defendant's Exhibit C). This patent describes an alloy comprising copper, phosphorus and silver, and it is argued that the Jones patent, since it does not include silver, cannot be construed to cover the solder comprising copper, phosphorus and silver.

In behalf of the plaintiff it is argued that the Canzler patent does not describe or claim or teach a solder. On the contrary, it describes an alloy for use in welding. Soldering and welding are admitted to be different processes. A solder is a metal or metallic alloy used when melted to join metallic surfaces. Welding is the union of metallic parts by heating the surfaces of the parts to be joined, then allowing the metals to flow together.

There is testimony in the instant case that the phosphorus in the welding alloy disclosed in the Canzler patent in 1914 was used merely as a reducing agent to prevent oxidation of the copper parts when they were raised to welding temperature, which is a much higher temperature than that to which such parts are raised when soldered.

At the time MacGregor obtained his patent of the copper-phosphorus-silver alloy, he stated during the prosecution of the application which resulted in his patent that Canzler was concerned with welding, not soldering, and that the amount of phosphorus in the Canzler welding alloy was little more than 1%, and that an alloy with that small amount [fol. 260] of phosphorus would not be suitable as a solder. (Plaintiff's Exhibit 6—File History of MacGregor's patent)

In a letter written by MacGregor before the instant litigation arose, to one of the branch plants of the Westinghouse Company, he complained that "Sil-Fos", a competitor's solder comprising 12% of silver in addition to copper

and phosphorus was being used. MacGregor made the following statement (Plaintiff's Exhibit 5):

> As to the material itself you know as well as any of us that an alloy of silver and copper does not make a brazing alloy. Their material does the job not because it contains silver, but because, and only because it contains phosphorus. The silver is only so much camouflage. It contributes no valuable property—its only value—to the benefit of H. & H.—is that it slightly lowers the beginning of the melting range just enough to get around our claims. And who cares about a few degrees lower melting range when a joint is being made?

These statements made by MacGregor both at the time of the application for his patent and subsequently by letter cited supra are tantamount to admissions against his own interest. Further, the additions of tin or silver in MacGregor's two solders, even if constituting patentable improvements, do not take defendant's solder outside of the scope of the Jones patent. It has been held repeatedly in patent cases that the mere fact that defendant's device is a [fol. 261] patentable improvement upon that of a patent in suit, is no defense to a charge of infringement, for if the first patent is basic, the later ones on the same subject, even though improvements, if they incorporate the basic idea are considered infringements.

> Temco v. Apco, 275 U. S. 319
> Edmands v. Perlman, 248 F.R. 731
> Walker on Patents, page 1691

The plaintiff introduced evidence to establish the fact that the prior art does not disclose the Jones solder and that even though Gulliver in his textbook—"Metallic Alloys—1913" commented upon an alloy made of copper and phosphorus that was no bar to a patentable invention making new use of such old material.

The defendant argues strenuously that the Jones patent is invalid for want of novelty and that it is disclosed in the prior art. To establish this, the defendant introduced evidence of Daudelin patent No. 989,573 of 1911, Canzler prior art patent No. 1,103,482, discussed supra, Maxon patent No.

532,890 of 1895, British patent No. 5560 of 1892, and French patent No. 417, 307 of 1910, as well as Gulliver's book "Metallic Alloys" of 1913, and Brannt's "The Metallic Alloys" of 1896.

In its Findings of Fact the Court has differentiated these patents from the Jones patent and comes to the conclusion that while Jones did not invent a copper-phosphorous alloy *per se*, he did discover that a copper-phosphorous alloy in [fol. 262] which phosphorous was preferably between 6 and 9% of the total makes a hard solder that has distinct advantages over solders used in the prior art for the purpose of brazing. Further discussion of this phase of the argument is not necessary.

From the evidence in its entirety the Court is of the opinion that defendant's (a) copper-phosphorus-tin solder and defendant's (b) copper-phosphorus-silver solder are within the scope of the Jones patent. Therefore, there is no need to consider the principle of estoppel by virtue of accepting a license under the Jones patent.

The defendant relies on the recent decision of the Supreme Court in the case of *Sola Electric Company v. Jefferson Electric Company*, 63 S. C. 172, decided by the United States Supreme Court September 7, 1942, as authority for the right of a licensee to attack the validity of a licensed patent, when such license contains price-fixing clauses. It is argued by the defendant that since the present license contains price-fixing clauses, Sections 5 and 6, that fact gives the licensee the right to offer evidence to establish the invalidity of the patent and thus establish illegality of the price-fixing clause and make the contract as a whole unenforceable.

The Jefferson Electric Company licensed Sola under a patent whereupon Sola was required to maintain the prices established by Jefferson for its sale of the patented products and required to pay royalties on the licensed products. After having operated under the license for some time, Sola [fol. 263] refused to pay royalties on certain of the licensed products and refused to maintain licensor's established prices on these products. It asserted that the only claims of the patent covering the product on which royalties and price maintenance were refused had been held invalid for want of novelty as it asserted had been recognized by the Sixth Circuit Court of Appeals in *France v. Jefferson*, 106 F. (2d) 605.

Jefferson then used Sola to recover the royalties withheld, also for an injunction restraining Sola from selling the licensed products at prices below those established by the licensor. The United States Seventh Circuit Court of Appeals *(125 F. 2d) 322*q held that Sola was estopped to deny validity of any claims of the licensed patent so long as it remained a licensee under the patent, ordered it to pay the accrued royalties and enjoined it from selling any licensed products in violation of the price-fixing clause of the contract. The Supreme Court held that a defendant sued under a license contract containing a price-fixing clause, where respondent sought recovery of unpaid royalties and also an injunction restraining further sales except in conformity to the terms of the license agreement, may challenge the legality of the price-fixing clause by pleading and proving that the licensed patent is invalid. It is clear that Sola was required to maintain the prices established by *Jefferson in* selling the patented products. Such restriction on the price of articles entering interstate commerce are [fol. 264] held to be a violation of the Sherman Act, save only as it is within the protection of a lawfully granted patent monopoly. Therefore, the licensee was granted the right to attack the validity of the patent.

That the price-fixing clause in the Sola case was directly in issue appears clearly from the Court's statement of the case. In the first paragraph of the Court's opinion, Mr. Justice Stone said:

> The question for our decision is whether a patent licensee, by virtue of his license agreement, is estopped to challenge a price-fixing clause in the agreement by showing that the patent is invalid.

MacGregor's position in the instant case is that this decision of the Supreme Court gives any licensee the right to refuse to pay royalties and to attack the validity of the patent, if there is a price-fixing clause in the license agreement, regardless of whether the price-fixing clause is involved in the litigation to recover royalties.

It is argued in behalf of the plaintiff that the Sola case goes no further than to give to a licensee the right to defend against enforcement of a price-fixing clause by attacking the validity of the licensed patent.

To interpret the Sola case as the defendant would have us do would make of the entire Patent Law a farce—no pat-

ent worth the paper on which it is written. In the instant case the court has not been requested either directly or indirectly to require MacGregor to maintain Westinghouse [fol. 265] prices. By his own testimony he has not maintained them. The price-fixing clause is not in issue. It is raised merely as a defense to a suit for accounting and payment of accrued royalties. The legality, the enforceability of the price-fixing clause is a moot question. We therefore do not propose to declare the Jones patent invalid. Whether the price-fixing clause in the license is legal or invalid is not before this Court. It is our judgment that the decision of the Sola case does not control or determine the instant case.

By way of counterclaim, MacGregor sought to recover $6029.94 royalties paid from 1937 to 1941 on his copper-phosphorous-tin solder (Defendant's Exhibit O) and also seeks to recover damages because of plaintiff's alleged violation of the Sherman Act.

At the trial of the case the trial judge excluded evidence relating to damages, for the reason that the Sherman Act, on which defendant's counsel relied, gives sole jurisdiction in the matter of the claim for damages for its violation to the United States Court. This disposes then of the matter of damages.

As to the counterclaim for royalties alleged to have been paid by mistake, there is no evidence of any mistake in fact. If mistake exists, under the evidence, it is a mistake of law. At the time the license agreement was entered into and the suit for infringement of the patent was pending in the United States District Court, MacGregor, represented by the same counsel as now, saw fit to take out the license and for four years paid royalties thereon. No evidence has been [fol. 266] offered by the defendant as to the nature of the alleged mistake under which the royalties on the copper-phosphorus-tin solder were paid. No newly discovered fact is pleaded or proved. No misrepresentation or concealment is charged. There is no evidence as to what constituted the mistake made by MacGregor in 1937, when he entered into the instant agreement. Everything offered in the instant case to attack the validity of the Jones patent was equally of record and available in 1937. Therefore, there is no evidence before the court of any mistake in fact.

It is a fundamental principle of law that mistake of law does not excuse performance or require restitution under a contract.

> A "mistake of law" arises when a person having full knowledge of the facts comes to an erroneous conclusion as to their legal effect.
>
> Dampskibs Aktieselskabet Thor v. Tropical Fruit Co., 281 F. 740.

> A misrepresentation of misunderstanding of the law will not vitiate a contract, where there is no misunderstanding of the facts.
>
> Upton v. Tribilcock, 91 U. S. 45;
> Fink v. Farmers Bank, 178 Pa. 154;
> Clark v. Lehigh, 250 Pa. 304;
> Shields v. Hitchman, 251 Pa. 455;
> Miners & Merchants Bank, 313 Pa. 118.

In the Findings of Fact made part hereof, the Court finds the defendant's (a) copper-phosphorus-tin, and (b) copper-phosphorus-silver solders come under the Jones Patent. [fol. 267] The license agreement is legal. Therefore the defendant must account for sales of both solders and pay the royalties found to be due on such accounting.

Conclusions of Law

1. MacGregor's copper-phosphorus-tin solder is within the scope of claims 1, 2, 3, and 4 of Jones patent No. 1,651,709 and therefore comes under the terms of the license agreement.

2. MacGregor's copper-phosphorus-silver solder is within the scope of claims 1, 2, 3, and 4 of the Jones Patent No. 1,651,709, and therefore comes under the terms of the license agreement.

3. Under the terms of the license agreement, MacGregor is obligated to account for all of the licensed solders that he has made and sold since November 16, 1937, and to pay royalty thereon as specified in the said license.

4. Plaintiff is entitled to an accounting to determine the amount of licensed solder that has been sold by MacGregor

since November 16, 1937, upon which royalty has not been paid.

5. The license agreement Exhibit 2 does not obligate MacGregor to fix resale prices of the licensed solder.

6. Since the price-fixing clauses (5 and 6) of the license contract have not been asserted in this suit, any challenge [fol. 268] by defendant of the legality and enforceability thereof raises moot issues.

7. Since the Jones patent is presumptively valid, the price-fixing clauses 5 and 6 of the license agreement are presumptively legal.

8. The case of *Jefferson v. Sola*, 63 S. C. 172, does not give defendant a right, under the pleadings and facts of this case, to challenge validity of the price-fixing clauses 5 and 6 of the license agreement.

9. Defendant, being a licensee, and the price-fixing clauses of the license not being in suit, is estopped to attack the validity of the patent under which he is licensed.

10. The price-fixing clauses 5 and 6 of the contract are divisible subject matter, inserted for the benefit of the licensor as a restriction on the license granted, and even if they were *per se* illegal could be stricken out of the license with no effect on the obligation to pay royalty.

11. As between these parties the Jones patent No. 1,651,709 is valid, and the license agreement is legal and enforceable.

12. There is no support in either the pleadings or the evidence for defendant's counterclaim.

13. Royalties paid by defendant as shown in Defendant's Exhibit O were properly paid under the license agreement, were not paid by mistake either of fact or of law, and defendant has established no right to restitution thereof.

[fol. 269] 14. If there was a mistake in paying royalties on MacGregor's Copper-Phosphorus-Tin solder, it was a mistake of law and no recovery can be had thereon.

15. There has been no such violation of the Sherman Act. (U. S. C. A. Sec. 1, et seq.) pleaded or proved by defendant

in this case as to constitute a defense to plaintiff's suit for royalties due under the license contract.

16. This Court has no jurisdiction to award damages for violation of the Sherman or other Federal anti-trust acts (U. S. C. A. Sec. 1, et seq.).

17. Judgment should be entered ordering and directing that the defendant render an account to the plaintiff (a) for all sales of brazing solders containing tin manufactured, and since January 1, 1940, to the date of such accounting, sold by the defendant, all such solders being covered by U. S. Letters Patent No. 1,651,709 issued by the United States Patent Office to the plaintiff as assignee, and (b) for all sales of brazing solders containing silver manufactured, and since November 16, 1937, to the date of such accounting, sold by the defendant, all of same being covered by said U. S. Letters Patent No. 1,651,709; that the plaintiff have the right to inspect the books and papers of the defendant and have free access to them for that purpose; that such account be rendered by the defendant within thirty days from the date of the judgment; and that this Court retain jurisdiction over the subject matter and parties for the [fol. 270] purpose of enforcing such judgment and any subsequent order or judgment that may be entered in the above-entitled case.

ORDER OF COURT

And now, to wit, this 7th day of July, 1943, the Prothonotary of the Court is directed to give forthwith to the parties, or their attorneys, notice of this decision, and if no exceptions thereto are filed in the Prothonotary's office within thirty days after service of such notice, judgment shall be entered thereon by the said Prothonotary conformably to the within Conclusion of Law No. 17.

By the Court, S. M. S.

Eo die, exception noted to defendant and bill sealed.

Sara M. Soffel, Trial Judge. (Seal.)

In Court of Common Pleas

Exceptions to Findings of Fact, Conclusions of Law and Order of Court—Filed July 28, 1943

And now comes defendant above-named, by his attorney, and excepts to the Findings of Fact, Conclusions of Law and Order filed in the within cause, and assigns the following as error:

First

The trial judge erred in the third finding of fact in finding that the solder manufactured and used by Westinghouse [fol. 271] Electric & Manufacturing Company, comprising 93% copper and 7% phosphorus, is the "patented solder".

Second

The trial judge erred in the thirteenth finding of fact in finding that the copper-phosphorus-tin solder manufactured by MacGregor commences to melt at 705° C, is completely fluid at 822° C, and is used for soldering at some temperature above 822° C.

Third

The trial judge erred in finding in the fourteenth finding of fact that MacGregor's copper-phosphorus-silver solder commences to melt at 685° C, but is not entirely melted below 800° C and is used for soldering at a temperature above 800° C.

Fourth

The trial judge erred in finding in the fifteenth finding of fact that there is no noticeable difference in operating results in soldering with plaintiff's solder as made and sold by Westinghouse, and the copper-phosphorus-tin and copper-phosphorus-silver solders as made and sold by MacGregor.

Fifth

The trial judge erred in the sixteenth finding of fact in classifying the defendant's solders hard solders.

Sixth

The trial judge erred in the eighteenth finding of fact [fol. 272] in classifying the prior art patent to Daudelin No. 989,573 as disclosing a soft solder.

Seventh

The trial judge erred in the nineteenth finding of fact in finding that there is nothing in the Canzler Patent No. 1,103,482 that suggested the making of a solder or that teaches any purpose or advantage in using phosphorus in an alloy of copper-phosphorus or copper-phosphorus-silver to an extent greater than 1% of the total alloy.

Eighth

The trial judge erred in the twentieth finding of fact in classifying the prior art Maxon Patent No. 532,890 as disclosing a soft solder.

Ninth

The trial judge erred in the twenty-second finding of fact in classifying the French Patent No. 417,307 as disclosing a soft solder.

Tenth

The trial judge erred in the twenty-third finding of fact in finding that the publication Gulliver's "Metallic Alloys" of 1913 (Defendant's Exhibit H) does not suggest or teach that such an alloy can be used as a solder or would be useful as a solder.

Eleventh

The trial judge erred in the twenty-fifth finding of fact in finding that the Jones patent describes the invention as a copper-phosphorus alloy in which the phosphorus was [fol. 273] preferably between 6 and 9% of the total.

Twelfth

The trial judge erred in the thirtieth finding of fact in finding that MacGregor was never requested under the license contract or otherwise to fix resale prices on licensed solder sold by him.

Thirteenth

The trial judge erred in the thirty-first finding of fact in finding that payments made by MacGregor on his copper phosphorus tin solder were not made under any mistake of fact.

Fourteenth

The trial judge erred in amending defendant's requested second finding of fact by deleting therefrom the underlined portion, as follows:

> "On November 16, 1937 the parties to this suit entered into a license agreement (PX-2) under which defendant was granted the non-exclusive license to make, use and sell brazing solders covered by Jones Patent No. 1,651,709 for a royalty of ten (10%) percent of the selling price, the license providing, paragraphs numbered 5 and 6 thereof, that defendant's selling prices shall be no more favorable than those established and maintained by Westinghouse Electric and Manufacturing Company for its own sales under the patent to such or other similarly situated customers purchasing in like quantities, and that the reduc-[fol. 274] tion of Westinghouse Electric and Manufacturing Company's sales prices or alteration of Westinghouse's selling terms and condition of sale directly or indirectly, *either by MacGregor or through his agents or others*, would be regarded as an evasion and breach of the license.

Fifteenth

The trial judge erred in refusing defendant's requested fourth finding of fact, as follows:

> "The distributor price list 26-826 contains a schedule of user prices and specific instructions on how the distributors shall determine the user or resale price which MacGregor was required to enforce under the license contract (MacGregor, R. 59, 60)."

Sixteenth

The trial judge erred in amending defendant's seventh finding of fact by deleting therefrom the underlined portion, as follows:

> "The Jones Patent No. 1,651,709 describes a solder of copper and phosphorus containing less than 10% of phosphorus and describes the eutectic alloy of 8.27% phosphorus and the remainder copper which melts at about 707° C as especially suitable for brazing copper

or copper alloys; the patent further states that a phosphorus copper alloy which contains from 6 to 9% phosphorus is suitable for brazing the bars and end rings of rotors for induction motors, *and no other combination* [fol. 275] *of copper and phosphorus is disclosed as suitable for soldering.*"

Seventeenth

The trial judge erred in amending defendant's requested eighth finding of fact by deleting therefrom the underlined portion, as follows:

"The file history of the Jones Patent No. 1,651,709 (DX-A) shows that the original claims filed in the United States Patent Office were for a solder comprising an alloy of copper and phosphorus containing less than 10% of phosphorus; a solder comprising an alloy of copper and phosphorus containing about 6 to 9% phosphorus; a solder comprising a eutectic alloy of copper and phosphorus containing 8.27% phosphorus which melts at 707° C, which are for *the* copper phosphorus soldering alloys described in the patent specification."

Eighteenth

The trial judge erred in amending defendant's eleventh requested finding of fact by deleting therefrom the underlined portion, as follows:

"The MacGregor copper phosphorus tin alloy comprising 92.25% copper, 7.25% phosphorus and .5% tin comes within the copper phosphorus range of the original claims filed in the Jones application for solder containing less than 10% phosphorus or from 6 to 9% phosphorus, or the eutectic alloy of copper and phosphorus, which the file history of the Jones patent shows [fol. 276] were cancelled *and disclaimed as the invention of Jones.*"

Nineteenth

The trial judge erred in amending defendant's requested twelfth finding of fact by deleting therefrom the underlined portion, as follows:

"The MacGregor copper phosphorus silver alloy comprising 90.5% copper, 7.5% phosphorus and 2%

silver comes within the copper phosphorus range of the original claims filed in the Jones application for solder containing less than 10% phosphorus or from 6 to 9% phosphorus, or the eutectic alloy of copper and phosphorus, which the file history of the Jones patent shows were cancelled *and disclaimed as the invention of Jones.*"

Twentieth

The trial judge erred in refusing defendant's requested thirteenth finding of fact, as follows:

"The MacGregor tin and silver alloys contain the percentage of phosphorus and melt at the temperatures shown in the chart, Fig. 212, of the Gulliver publication, "Metallic Alloys" (DX-H) published 1913."

Twenty-First

The trial judge erred in amending defendant's requested fourteenth finding of fact by deleting therefrom the underlined portion, as follows:

"Claim 1 of the Jones Patent No. 1,651,709 defining a brazing solder which consists of an alloy of substantially 6 to 10% phosphorus and the remainder copper [fol. 277] includes the eutectic alloy containing about 8.27% phosphorus and the phosphorus copper alloy containing 6 to 9% phosphorus, *and the alloy containing 10% or less phosphorus, the only alloys described by the patent.*"

Twenty-Second

The trial judge erred in refusing defendant's requested sixteenth finding of fact, as follows:

"'Claim 3 of the Jones Patent No. 1,651,709 which defines a brazing solder having a melting point between 700 and 900° C consisting of phosphorus and copper, includes the melting point of all of the alloys described by the patent and includes the eutectic alloy which melts at 707° C, the alloy containing 6 to 9% phosphorus and the alloy containing 10% or less of the phosphorus, which melt at between 700 and 900° C."

Twenty-Third

The trial judge erred in amending defendant's requested twenty-first finding of fact by adding thereto the underlined portion, as follows:

"The patent to Daudelin No. 989,573 (DX-B) discloses a solder containing silver phosphorus and copper *and other ingredients.*"

Twenty-Fourth

The trial judge erred in refusing defendant's requested twenty-second finding of fact, as follows:

"Payments by MacGregor to plaintiff on his copper phosphorus tin solder were made under mistake of fact."

[fol. 278]

Twenty-Fifth

The trial judge erred in concluding the following:

"1. MacGregor's copper-phosphorus-tin is within the scope of claims 1, 2, 3 and 4 of Jones patent No. 1,651,709 and therefore comes under the terms of the license agreement."

Twenty-Sixth

The trial judge erred in concluding the following:

"2. MacGregor's copper-phosphorus-silver solder is within the scope of claims 1, 2, 3 and 4 of the Jones Patent No. 1,651,709 and therefore comes under the terms of the license agreement."

Twenty-Seventh

The trial judge erred in concluding the following:

"3. Under the terms of the license agreement, MacGregor is obligated to account for all of the licensed solders that he has made and sold since November 16, 1937, and to pay royalty thereon as specified in the said license."

Twenty-Eighth

The trial judge erred in concluding the following:

"4. Plaintiff is entitled to an accounting to determine the amount of licensed solder that has been sold

by MacGregor since November 16, 1937, upon which royalty has not been paid."

[fol. 279] Twenty-Ninth

The trial judge erred in concluding the following:

"5. The license agreement Exhibit 2 does not obligate MacGregor to fix resale prices of the licensed solder."

Thirtieth

The trial judge erred in concluding the following:

"6. Since the price-fixing clauses (5 and 6) of the license contract have not been asserted in this suit, any challenge by defendant of the legality and enforceability thereof raises moot issues."

Thirty-First

The trial judge erred in concluding the following:

"7. Since the Jones patent is presumptively valid, the price-fixing clauses 5 and 6 of the license agreement are presumptively legal."

Thirty-Second

The trial judge erred in concluding the following:

"8. The case of *Jefferson v. Sola*, 63 S.C. 172, does not give defendant a right, under the pleadings and facts of this case, to challenge validity of the price-fixing clauses 5 and 6 of the license agreement."

[fol. 280] Thirty-Third

The trial judge erred in concluding the following:

"9. Defendant, being a licensee, and the price-fixing clauses of the license not being in suit, is estopped to attack the validity of the patent under which he is licensed."

Thirty-Fourth

The trial judge erred in concluding the following:

"10. The price-fixing clauses 5 and 6 of the contract are divisible subject matter, inserted for the benefit of

the licensor as a restriction on the license granted, and even if they were *per se* illegal could be stricken out of the license with no effect on the obligation to pay royalty."

Thirty-Fifth

The trial judge erred in concluding the following:

"11. As between these parties the Jones patent No. 1,651,709 is valid, and the license agreement is legal and enforceable."

Thirty-Sixth

The trial judge erred in concluding the following:

"12. There is no support in either the pleadings or the evidence for defendant's counterclaim."

Thirty-Seventh

The trial judge erred in concluding the following:

[fol. 281] "13. Royalties paid by defendant as shown in Defendant's Exhibit O were properly paid under the license agreement, were not paid by mistake either of fact or of law, and defendant has established no right to restitution thereof."

Thirty-Eighth

The trial judge erred in concluding the following:

"14. If there was a mistake in paying royalties on MacGregor's copper-phosphorus-tin solder, it was a mistake of law and no recovery can be had thereon."

Thirty-Ninth

The trial judge erred in concluding the following:

"15. There has been no such violation of the Sherman Act (U.S.C.A. Sec. 1, et seq.) pleaded or proved by defendant in this case as to constitute a defense to plaintiff's suit for royalties due under the license contract."

Fortieth

The trial judge erred in concluding the following:

"16. This Court has no jurisdiction to award damages for violation of the Sherman or other Federal anti-trust acts (U.S.C.A. Sec. 1, et seq.)."

Forty-First

The trial judge erred in concluding the following:

[fol. 282] "17. Judgment should be entered ordering and directing that the defendant render an account to the plaintiff (a) for all sales of brazing solders containing tin manufactured, and since January 1, 1940, to the date of such accounting, sold by the defendant, all such solders being covered by U. S. Letters Patent No. 1,651,709 issued by the United States Patent Office to the plaintiff as assignee, and (b) for all sales of brazing solders containing silver manufactured, and since November 16, 1937, to the date of such accounting, sold by the defendant, all of same being covered by said U. S. Letters Patent No. 1,651,709; that the plaintiff have the right to inspect the books and papers of the defendant and have free access to them for that purpose; that such account be rendered by the defendant within thirty days from the date of the judgment; and that this Court retain jurisdiction over the subject matter and parties for the purpose of enforcing such judgment and any subsequent order or judgment that may be entered in the above-entitled case."

Forty-Second

The trial judge erred in directing that judgment be entered conformably to the Seventeenth conclusion of law.

Forty-Third

The trial judge erred in refusing defendant's conclusions of law First to Tenth inclusive, Twelve and Thirteen.

[fol. 283] Forty-Fourth

The trial judge erred in refusing to admit evidence to show that a comparison of operational results between the

plaintiff's and defendant's alloys does not alone establish infringement or use by defendant of plaintiff's invention.

Offer (p. 15): The plaintiff's witness Graham was asked on cross-examination whether a large number of non-ferrous alloys used as solders other than those made by Westinghouse and MacGregor made a joint by soldering with heat of the same operational results as the plaintiff's and defendant's solders.

Ruling (p. 16): Cross-examination must be confined to operational results of plaintiff's and defendant's solders only.

Forty-Fifth

The trial judge erred in refusing to admit evidence showing that the different solders of the plaintiff's patent produce different functional results.

Offer (p. 19): Q. What would be the difference between a solder having ten percent phosphorus and one having seven percent, so far as these tests that you made are concerned?

Objection (p. 20): Mr. Brown: Objected to as a purely hypothetical question.

Ruling (p. 20): Objection sustained.

[fol. 284] Forty-Sixth

The trial judge erred in refusing to admit evidence showing that the functional results of the different alloys made by defendant are not the same.

Offer (p. 22): Would the functional results of defendant's alloy be the same if it contained 2% phosphorus?

Objection (p. 22): Mr. Brown: I object to that.

Ruling (p. 22): Objection sustained.

Forty-Seventh

The trial judge erred in refusing defendant's motion to dismiss the complaint when plaintiff rested.

Motion (p. 25): Counsel for defendant moved for dismissal of the bill on the ground that the infringement has not been proven by the plaintiff.

Ruling (p. 25): Motion for dismissal is refused.

Forty-Eighth

The trial judge erred in refusing to admit evidence that defendant was required to enforce the resale price at which dealers sold to the consumer under the price-fixing clause of the license agreement.

Offer (p. 34): Mr. Seastone, of the plaintiff company, was asked— Did you not complain about a New England distributor selling at less than the list price, in my office?

[fol. 285] Objection (p. 34): Mr. Brown: Objected to as immaterial.

Ruling (p. 34): Objection sustained.

Forty-Ninth

The trial judge erred in refusing to admit evidence that Westinghouse fixed the resale price of its patented solders.

Offer (p. 16): Mr. Seastone, of Westinghouse, after admitting that the Westinghouse price list schedules were prepared only for Westinghouse and defendant, MacGregor, was asked: And does Westinghouse furnish both the user price list and distributor price list to their distributors?

Objection (p. 35): Mr. Brown: I don't see the materiality of that as to what Westinghouse does with other distributors. We object to it.

Ruling (p. 37): Objection sustained.

Fiftieth

The trial judge erred in refusing to admit evidence establishing that Westinghouse required MacGregor to fix and maintain the resale price of the patented alloys.

Offer (p. 47): Mr. Seastone of Westinghouse was asked: Was there not at the time that letter was written, some dispute about maintaining resale prices?

Objection (p. 41): Mr. Brown: I object to that. He went into that on direct examination and that was all cleared up. He said there might have been some question raised about [fol. 286] it at the time and it was all talked out, and a clear understanding was reached.

Ruling (p. 41): Objection sustained.

Fifty-First

The trial judge erred in refusing to admit evidence that Westinghouse has a dealer agreement requiring the dealers

to maintain the resale price of Westinghouse price schedules, in violation of the Sherman Anti-Trust Laws.

Offer (p. 159): Mr. Seastone of Westinghouse, who testified that he was responsible for putting out the price schedules (p. 32), was asked: In this distributor price list 26-826, defendant's Exhibit L, there appears the statement "This discount sheet is to be used only with duly authorized and appointed distributors who buy phos-copper brazing alloy only for re-sale purposes and who with respect to such alloy have signed an agreement in the form of 18349, sheets 1 and 2." What is the nature of that agreement?

Objection (p. 159): Mr. Brown: Objected to. When offered in connection with the price fixing proposition, I think it was understood that objection need not be repeated specifically. I repeat the objection generally, and in addition I object to this question because this Exhibit was put in by the defendant, and this witness was called by the [fol. 287] defendant, and the Exhibit that he put in refers to some contract of some code number. It is improper to prove the contents of that contract by this witness. If this defendant wanted that contract in evidence he should have called on us to produce it. I certainly object to this witness saying even what some contract or form of paper of some kind may contain, merely by reference to a code number in defendant's Exhibit.

Ruling (p. 160): Objection sustained.

Offer (p. 160): Mr. Seastone, do you have any secret agreements not known to Mr. MacGregor, with your distributors?

Objection (p. 160): Mr. Brown: I object to that.

Ruling (p. 160): Objection sustained.

Offer (p. 161): Have you ever furnished Mr. MacGregor with a copy of your distributor agreements?

Objection (p. 161): Mr. Brown: I object to the question as irrelevant and immaterial.

Ruling (p. 161): Objection sustained.

Offer (p. 161): Was Mr. MacGregor ever furnished a copy of your distributor agreement 18349, sheets 1 and 2, referred to in your distributor price list?

Objection (p. 161): Mr. Brown: Objected to.

Ruling (p. 161): Objection sustained.

[fol. 288]

Fifty-Second

The trial judge erred in refusing to admit evidence of damages sustained by defendant by plaintiff's unlawful price fixing acts.

Offer (p. 94): Mr. Jaspert: We would now like to proceed with the question of damages. I would like to read into the record the section of the Sherman Act providing for damages.

Ruling (p. 96): The defendant is not permitted to offer evidence relating to damages.

Fifty-Third

The trial judge erred in refusing to admit evidence of the fact that the claims of the plaintiff's patent include within their scope the eutectic of copper and phosphorus disclosed in the publication to Gulliver and cancelled from the Jones patent.

Offer (p. 66): Would the eutectic alloy of copper and phosphorus also come within the range that contains ten percent or less of phosphorus?

Objection (p. 66): Mr. Brown: I object to that. That is just playing checkers. He is saying, does 8.3 come between one and ten. That seems to me to be utterly immaterial. I think it is vague and indefinite and immaterial.

Ruling (p. 66): The Court is not concerned with what may have been in the patent at one time. We are con-
[fol. 289] cerned with the patent as it is here.

Fifty-Fourth

The trial judge erred in refusing to admit evidence of the prior art in anticipation of the invention of the patent.

Offer (p. 69): Do you find in that publication a description of the eutectic of copper and phosphorus alloys?

Ruling (p. 72): Immaterial.

Fifty-Five

The trial judge erred in refusing to admit evidence showing that the publication to Gulliver disclosed the alloy of the plaintiff's patent.

Offer (p. 72): Do you find in the publication to Gulliver the exact same formula of eutectic of copper and phosphorus as given in the Jones Patent?

Ruling (p. 73): Defendant is estopped from attacking the validity of the patent.

Fifty-Sixth

The trial judge erred in refusing to admit evidence showing that the claims of the plaintiff's patent embrace within their scope the subject matter originally claimed and cancelled from the patent application.

Offer (p. 73): Does a brazing solder of copper and phosphorus, melting between 700 and 900 degrees Centigrade, have the eutectic of 8.27 phosphorus in its range?

[fol. 290] Objection (p. 73): Mr. Brown: I object to that. I don't know what he is driving at. There is no antecedent that I know of. I object to the question as indefinite.

Fifty-Seventh

The trial judge erred in refusing to admit evidence showing that in the prosecution of the application of the Jones patent in the United States Patent Office, the inventor had distinguished the invention of the plaintiff's patent from patent to Canzler No. 1,103,482, by pointing out that plaintiff's solder does not contain silver and is now asserting that its patent covers the defendant's copper phosphorus and silver alloy.

Offer (p. 76): I hand you patent number 1,103,482 marked defendant's Exhibit C, which I offer in evidence as part of the file wrapper history of the patent.

Objection (p. 76): Mr. Brown: Are you offering this to attack the validity of the Jones license and patent?

Offer (p. 76): Mr. Jaspert: Both.

Ruling (p. 76): Refused for purpose of attacking validity of patent.

Fifty-Eighth

The trial judge erred in refusing to admit evidence showing similarity between defendant's solder and the solder disclosed in the Canzler patent.

Offer (p. 77): Mr. MacGregor, I will ask you whether there is any similarity or difference between the copper [fol. 291] phosphorus and silver alloy in your patent and that of Canzler?

Objection (p. 77): Mr. Brown: We object to the witness taking these documents and telling the Court what is in

them. I think your Honor would have to read them.

Ruling (p. 78): Objection sustained.

Fifty-Ninth

The trial judge erred in view of the next preceding ruling in overruling defendant's objection to plaintiff's witness Graham's testimony as to his understanding of the disclosure of the Canzler patent.

Offer (p. 166): What do you understand from the disclosure of the Canzler Patent as to the amount of the Phosphorus *as to the amount of the phosphorus* which it teaches to be used in the alloy which it is attempting to patent?

Objection (p. 166): Mr. Jaspert: I object again to the question that is asked in regard to this patent and what it discloses. The patent speaks for itself.

Ruling (p. 166): This is rebuttal testimony. Mr. MacGregor has given his interpretation of this Canzler Patent. He specifically stated the phosphorus content therein, and he has worked it out right here in Court. This testimony is by way of rebuttal.

[fol. 292] Offer (p. 166): Mr. Jaspert: When I asked Mr. MacGregor in chief concerning any patent, I was stopped, and also in rebuttal.

Ruling (p. 166): Objection overruled.

Sixtieth

The trial judge erred in refusing to admit evidence establishing utility of defendant's silver alloy.

Offer (p. 78): For what purpose do you utilize the phosphorus in your patent pertaining to the silver alloy? That is patent number 2,162,627?

Objection (p. 78). Mr. Brown: Objected to as immaterial.

Ruling (p. 78): Objection sustained.

Sixty-First

The trial judge erred in refusing to admit evidence of utility of the alloys covered by defendant's patents.

Offer (p. 78): Why do you use the combination of copper and phosphorus as described in your patent?

Objection (p. 78): Mr. Brown: Objected to.

Ruling (p. 78): Objection sustained.

Sixty-Second

The trial judge erred in refusing to admit evidence of the purpose of employing phosphorus in copper phosphorus solders.

Offer (p. 81): How much phosphorus would be required as necessary to bring about such effect of deoxidizing or [fol. 293] preventing oxidation?

Objection (p. 81): Mr. Brown: I object to that.

Ruling (p. 81): Objection sustained.

Sixty-Third

The trial judge erred in refusing to admit evidence establishing definite characteristics of defendant's solder, as distinguished from plaintiff's solder.

Offer (p. 81): In other words, your alloys have definite recognizable characteristics?

Objection (p. 81): Mr. Brown: I object to that as leading.

Ruling (p. 82): Objection sustained.

Offer (p. 82): Is this likewise true of your copper phosphorus silver alloy?

Objection (p. 82): Mr. Brown: I object to that as leading.

Ruling (p. 82): Objection sustained.

Sixty-Fourth

The trial judge erred in granting plaintiff's motion to strike out defendant's answer which evidences that similarities and differences in the plaintiff's and defendant's alloys are the same as other alloys on the market.

Answer (p. 82): I would say no. I don't know what I am supposed to — when you are comparing alloys of this type whether they be the Jones alloy or the MacGregor copper phosphorus tin alloy or the MacGregor silver alloy [fol. 294] or other alloys which are on the market, belonging to the same general family of alloys, there are many, many points of similarity between various ones and there are points of difference between the various ones.

Objection and Motion (p. 83): Mr. Brown: I object to that answer and move to strike it out as unresponsive, irrelevant and immaterial.

Ruling (p. 83): Objection sustained. Motion to strike out is granted.

Sixty-Fifth

The trial judge erred in refusing to admit evidence showing that the percentages of copper phosphorus defined in the claims of the plaintiff's Jones patent are indefinite and possess no utility whatsoever.

Offer (p. 147): Mr. MacGregor, would a copper phosphorus alloy without any other component, of 80 percent copper and 20 percent phosphorus, be suitable for soldering?

Ruling (p. 149): Objected to as purely an expert question.

Sixty-Sixth

The trial judge erred in refusing to admit evidence showing that the range of copper and phosphorus within the scope of the claims of the Jones patent has no utility as a solder.

[fol. 295] Offer (p. 150): Mr. Jaspert: The Jones Patent shows an alloy comprising copper and phosphorus, in which the copper is in excess—is more than four to one in the ratio to the phosphorus. Now, 80 to 20 is four to one. May I ask the witness what would be within the range of four to one of copper and phosphorus?

Objection (p. 150): Mr. Brown: I object to that as immaterial.

Ruling (p. 151): Objection sustained.

Sixty-Seventh

The trial judge erred in refusing to admit evidence showing that the percentages of phosphorus specified in the Jones patent, other than those originally claimed and cancelled out of the patent, have no practical utility.

Offer (p. 151): Mr. MacGregor, would a phosphorus copper alloy having a ten percent phosphorus content be a suitable soldering material?

Ruling (p. 151): Question irrelevant and immaterial, and an expert question.

Sixty-Eighth

The trial judge erred in refusing to admit evidence showing that only one alloy described in the Jones patent is suitable for soldering, and defendant assigns the following rulings by the Court as error on this point.

Offer (p. 151): Is there any alloy specifically described [fol. 296] in the Jones Patent, that is suitable for soldering?

Objection (p. 152): Mr. Brown: I object to that question.

Ruling (p. 152): Objection sustained. Your own witness has said that it is a good solder.

Mr. Jaspert: Do I take it that the Court has ruled that I may not inquire of this witness whether any of the solders disclosed by the Jones Patent have any different characteristics than any other solders disclosed by that patent? (p. 153)

Ruling (p. 153): First of all, that question is not an intelligent question, in the judgment of the Court. The Court's answer to that is that it would rule on each question as it is presented. It has ruled and has noted an exception. I can't say what I am going to rule in the future until I hear the questions.

Offer (p. 153): Mr. MacGregor, is a copper phosphorus solder having 99 per cent copper and one percent phosphorus a suitable solder?

Objection (p. 154): Mr. Brown: Objected to.

Ruling (p. 154): Objection sustained.

Offer (p. 151): Mr. MacGregor, are both a solder having 80 percent copper and 20 percent phosphorus and a solder having 99 percent copper and one percent phosphorus, within the ratio of four to one, of copper and phosphorus? [fol. 297] Objection (p. 154): Mr. Brown. Objected to as immaterial.

Ruling (p. 154): Objection sustained.

Offer (p. 154). Mr. MacGregor, could you competitively sell a solder, of which the ingredients were unknown, to the extent that you would have to mark it, that it has a melting range of between 700 and 900 degrees Centigrade?

Objection (p. 154): Mr. Brown: Objected to as irrelevant and immaterial.

Ruling (p. 154): Objection sustained.

Sixty-Ninth

The trial judge erred in refusing to admit evidence that the range of melting temperatures in claims 2 and 3 of the Jones patent are indefinite and lack utility.

Offer (p. 174): Plaintiff's witness Graham was asked: Would you know, if a copper phosphorus alloy melts at say 797 degrees, what percentage of phosphorus is in that alloy?

Objection (p. 174): Mr. Brown: I object to that question. I don't think the direct examination led the witness up to that.

Offer (p. 174): Mr. Jaspert: I would like the witness to answer whether he knows, after experimentation as an expert, if a copper phosphorus solder melting at 800, 850 or 750, contains a definite percentage of phosphorus. I think that is a fair question.

[fol. 298] Ruling (p. 174): I don't think it is a fair question because you have a different melting point each time. Objection sustained.

Alpine R. MacGregor, Defendant, by William B. Jaspert, Attorney.

William B. Jaspert, Esq., 1301 First National Bank Building, Pittsburgh, Pa.

July 28, 1943.

IN COURT OF COMMON PLEAS

OPINION AND ORDER OF COURT—Filed January 24, 1944

Before McNaugher, Richardson and Soffel, JJ.

OPINION

SOFFEL, *J.*:

This case is before the court on exceptions ex parte defendant to the findings of fact and conclusions of law as found by the trial judge. Defendant has filed sixty-nine exceptions to the Court's findings and conclusions, which are now before us for consideration.

This suit is brought by the Westinghouse Electric & Manufacturing Company, plaintiff, against Alpine MacGregor, defendant, for an accounting and payment of royalties alleged to be due under a patent license contract, plaintiff's Exhibit 2, dated November 16, 1937. Judgment [fol. 299] was entered in favor of the plaintiff.

After careful consideration we are of the opinion that the exceptions should be dismissed and that the findings of fact, discussion, conclusions of law, and order of court filed by the trial judge July 7, 1943, should be incorporated in and made part of this opinion. The exceptions, for the most part, raise issues which were considered by the trial judge and, in our judgment, were properly resolved at that time.

The action of the court on exceptions is as follows:

IN RE: FINDINGS REQUESTED BY THE PLAINTIFF

(1) This exception is directed to the court's third finding of fact—that the solder manufactured and used by Westinghouse, comprising 93% copper and 7% phosphorus, is the "patented solder." Dismissed.

The court's third finding of fact properly refers to the Westinghouse commercial product as the "patented solder" because Claim 1 of the patent covers a brazing solder which consists of six to ten per cent phosphorus and the remainder copper.

(2) This exception is directed to the court's thirteenth finding of fact—that the copper-phosphorus-tin solder manufactured by MacGregor, the defendant, commences to melt at 705° C, is completely fluid at 822° C, and is used for [fol. 300] soldering at some temperature above 822° C. Dismissed.

The thirteenth finding is established by the testimony of plaintiff's witness Graham (Record—p. 163).

(3) This exception is directed to the court's fourteenth finding of fact—that MacGregor's copper-phosphorus-silver solder commences to melt at 685° C, is not entirely melted below 800° C, and is used for soldering at a temperature above 800° C. Dismissed.

This finding is established by the testimony of plaintiff's witness Graham (Record—p. 163).

(4) This exception is directed to the court's fifteenth finding of fact—that there is no noticeable difference in operating results between plaintiff's solder and the copper-phosphorus-tin and copper-phosphorus-silver solders of MacGregor. Dismissed.

This finding is established by the testimony of plaintiff's witness Graham (Record—p. 11-13) and by the defendant's testimony (Record—p. 115-116).

(5) This exception is directed to the court's sixteenth findings of fact—that defendant's solders are "hard solders." Dismissed.

This finding is established by the testimony of plaintiff's witness Graham (Record—p. 168) and the defendant's testimony (Record—pp. 140-141).

[fol. 301] (6) This exception is directed to the court's eighteenth finding of fact—that the prior art patent to Daudelin No. 989,573, discloses a "soft solder." Dismissed.

This finding is established by the testimony of plaintiff's witness Graham (Record,—p. 167-168) and is in accord with defendant's testimony (Record—p. 140-141).

(7) This exception is directed to the court's nineteenth finding of fact—that the prior art Canzler Patent No. 1,103,482 does not suggest the making of a solder, and does not teach any advantage in using more than 1% phosphorus in a copper-phosphorus or copper-phosphorus-silver alloy. (Dismissed.)

This is established by the testimony of plaintiff's witness Graham (Record—p. 167) and defendant's cross-examination (Record—p. 133-134). The Canzler Patent was directed specifically to a welding alloy. Graham states that as the date of the Canzler Patent (1914) "the amount of phosphorus necessary for the welding operation" (Canzler Patent, line 30) was understood to be 1% or less.

(8) This exception is directed to the court's twentieth finding of fact—that the Maxon Patent No. 532,890 discloses a "soft solder." Dismissed.

This is established by the testimony of plaintiff's witness Graham (Record — p. 168).

(9) This exception is directed to the court's twenty-second finding of fact—that French Patent No. 417,307 discloses a "soft solder." (Dismissed.)

[fol. 302] There is no direct testimony to this effect. An examination of the French Patent discloses the fact that lead, tin and zinc comprise 473 parts out of the total of about 500 parts and that these metals have a low melting point. MacGregor (Record—p. 143) describes the Maxon Patent as a soft solder because it contains lead, tin and zinc in proportions greater than the copper. This brings said patent then into the soft solder class.

(10) This exception is directed to the court's twenty-third finding of fact—that the publication, Gulliver's "Metallic Alloys" of 1913, does not suggest or teach that the alloy referred to therein can be used as a solder or would be useful as a solder. Dismissed.

An examination of the pages from said publication (Defendant's Exhibit H) reveals that the discussion is con-

fined to copper-phosphorus alloys generally. There is no discussion therein of solder. The text of said Exhibit H sustains the finding.

(11) This exception is directed to the court's twenty-fifth finding of fact—that the Jones Patent describes the invention as a copper-phosphorus alloy in which the phosphorus is preferably between 6 and 9% of the total. Dismissed.

This finding is justified by the specification of the Jones Patent which at lines 43-45, says:

> In practicing my invention, I provide an alloy of copper and phosphorus, usually containing less than 10% of phosphorus.

[fol. 303] At line- 61-67, the patent says:

> A single flame, usually an acetylene torch is directed on the annular groove containing the phosphorus copper alloy which preferably contains 6 to 9% phosphorus, quickly melting the same and causing it to flow into the spaces between the bars and end rings.

(12) This exception is directed to the court's thirtieth finding of fact—that MacGregor was never required under the license contract or otherwise to fix resale prices on licensed solder sold by him. Dismissed.

This finding is established by the testimony of Mr. Seastone, a Westinghouse official, in charge of this matter, called as a witness for defendant, who testified that MacGregor was never required to maintain resale prices (Record, p. 25-48). See also plaintiff's Exhibit 4, a letter from one of the patent attorneys of the Westinghouse Company to Mr. Jaspert, attorney for MacGregor.

(13) This exception is directed to the court's thirty-first finding of fact—that payments made by MacGregor on his two solders were not made under any mistake of fact. Dismissed.

The burden of establishing mistake of fact to avoid a contractual obligation is upon MacGregor, the defendant.

> Nothing less than evidence that is plain and convincing beyond reasonable controversy will constitute

[fol. 304] proof of mistake required to avoid payments under a contract.

Williston on Contracts—1937 Ed., Sec. 1597.

There is no evidence which establishes mistake of fact. Even if mistake had been found it would have been a mistake of law—not of fact. A mistake of law, under Pennsylvania decisions, does not excuse performance or require restitution under a contract.

Fink v. Farmers Bank, 178 Pa. 154.
Clark v. Lehigh, 250 Pa. 304.
Shields v. Hitchman, 251 Pa. 455.
Miners & Merchants Bank Case, 313 Pa. 118.

In Re: Findings Requested by the Defendant

(14) This exception is directed to the court's amendment of defendant's requested second finding of fact, to wit, the deletion of the phrase "either by MacGregor or through his agents or others." Dismissed.

This finding states the requirement that MacGregor shall not undersell Westinghouse directly or indirectly. The words "or through his agents or others" make no real difference in the context.

(15) This exception is directed to the court's refusal to sustain defendant's requested fourth finding of fact—that the Distributor Price List 28-826 (defendant's Exhibit L) required MacGregor to enforce user or resale prices. Dismissed.

[fol. 305] Plaintiff's Exhibit 4, Mr. Savage's letter of October 23, 1940, specifically informs the defendant that there had been and was no effort to control his resale prices. Mr. Jaspert's letter to Mr. Savage, dated August 12, 1940, plaintiff's Exhibit 3, indicates defendant's own counsel advised him that he could not legally maintain resale prices. Mr. Seastone, testifying as a witness for the defendant, stated that MacGregor was never required to maintain resale prices (Record—p. 31, 33, 34, 38, 44). The price list, defendant's Exhibit L, speaks for itself.

(16) This exception is directed to the action of the court in amending defendant's seventh requested finding of fact (II-6) by deleting therefrom the words "that no other combination of copper and phosphorus is disclosed as suitable for solder." Dismissed.

After pointing out that the patent discloses the desirability of using certain copper, phosphorus alloys as solders, the court struck out the last clause of defendant's proposed finding as stated above, for the reason that it was a speculative conclusion. The specification of the patent definitely contemplates some variation in the solder from the composition of 6 to 9% phosphorus. Claim 2 calls for a solder having phosphorus and copper as the "main and essential constituents thereof." The possibility of some minor added ingredients and of a variation of the copper-phosphorus proportions that would result in a solder having the melting range referred to is within the realm of contemplation.

[fol. 306] (17) This exception is directed to the court's action in amending defendant's requested eighth finding of fact (II-7) by deleting therefrom the word "the" in the third line from the bottom. Dismissed.

The finding as requested by the defendant was to the effect that certain specified compositions were "the copper-phosphorus soldering alloys described in the patent specification." The word "the" preceding copper-phosphorus was struck out. The word "the" as used in the context was restrictive in effect and therefore properly stricken. The retention of said word "the" would have the effect of excluding from the description any other copper-phosphorus alloy that could be utilized within the range claimed in the patent.

(18) This exception is directed to the court's action in amending defendant's eleventh requested finding of fact (II-10) by deleting therefrom the words "disclaimed as the invention of Jones." Dismissed.

The words omitted are a conclusion of law. There was no disclaimer of any subject matter covered by the claims that were actually issued as a part of the patent.

(19) This exception is directed to the court's action in amending defendant's requested twelfth finding of fact (II-11) by deleting therefrom the words "and disclaimed as the invention of Jones." Dismissed.

This is covered by the 18th exception which raises the same matter.

[fol. 307] (20) This exception is directed to the court's refusal of defendant's requested thirteenth finding of fact

to the effect that defendant's solders contain the percentage of phosphorus and melt at the temperatures shown in Fig. 212 of Defendant's Exhibit H, Gulliver Book. Dismissed.

The Gulliver publication speaks for itself. No expert testimony was offered to show its relation—if any—to defendant's solders. Since the Gulliver publication makes no reference to solders, the proposed finding is immaterial and irrelevant to the issues of the instant case.

(21) This exception is directed to the court's action in amending defendant's requested fourteenth finding of fact by deleting therefrom the words "and the alloy containing 10% or less phosphorus, the only alloys described by the patent." Dismissed.

This matter is raised by the 17th exception.

(22) This exception is directed to the court's refusal to adopt defendant's requested sixteenth finding of fact—that Claim 3 of the Jones Patent includes the melting point of all the alloys described in the patent. Dismissed.

This is a conclusion and there is no expert testimony to support such finding. We believe it to be immaterial to any issue of this case, since the solder as made by Westinghouse, and the two solders made by MacGregor, clearly fall within the range specified in Claim 3.

[fol. 308] (23) This exception is directed to the court's action in amending defendant's requested twenty-first finding of fact (II-18) by adding thereto "and other ingredients." Dismissed.

The court accepted defendant's proposed finding to the effect that the Daudelin prior art, patent No. 989,573, defendant's Exhibit B, discloses a solder containing silver, phosphorus and copper. The complaint is that the court should not have added to that finding that the patent also contained "other ingredients." An examination of the Daudelin patent establishes the fact that phosphorus and copper are comparatively minor constituents of the Daudelin solder which contains—

22 parts	silver
42 parts	phosphorus
238 parts	copper
1338 parts	lead
5051 parts	tin

50 parts ..... aluminum
939 parts ..... zinc

See the patent, lines 43 to 48. At lines 80 to 105 the patent makes clear that these other constituents are material to the product desired by Daudelin. For example, the patent says:

> The *lead* makes the solder run freely and adhere to the joints of most of the known metals. * * *
> *Tin* is used as the body or foundation of the solder. * * *
> [fol. 309] *Aluminum* is used to enable the solder to adhere to aluminum. * * *
> The *zinc* is used as customary in solders, to assist in adhesion of the solder to other metals. * * *

(24) This exception is directed to the court's refusal to adopt defendant's requested twenty-second finding of fact —that payments by MacGregor to plaintiff on his copper-phosphorus-tin solder were made under mistake of fact. Dismissed.

This is covered by the 13th exception.

IN RE: CONCLUSION OF LAW REQUESTED BY DEFENDANT

(25) This exception is directed to the court's first conclusion of law—that defendant's copper-phosphorus-tin solder comes under Claims 1, 2, 3, and 4 of the Jones Patent in suit and therefore is covered by the terms of the license agreement. Dismissed.

Claim 1 covers a brazing solder consisting of an alloy of substantially 6 to 10 per cent phosphorus, the remainder of the solder being copper. *Claim 2* calls for a brazing solder having a melting point between 700 and 900° C. and containing phosphorus and copper as the main and essential constituents thereof. *Claim 3* calls for a brazing solder consisting of phosphorus and copper and having a melting [fol. 310] point between 700 and 900° C. *Claim 4* calls for a solder comprising copper and phosphorus as the main and essential constituents thereof, the ratio of copper to phosphorus being greater than 4 to 1.

At the time MacGregor was sued in the Federal Court for infringement, he took a license to avoid the hazard of said

suit. He was making at that time his copper-phosphorus-tin solder No. 1300 composed approximately of 92.25% copper, 7.25% phosphorus, and .5% tin. It melts between 700 and 900° C. Copper is more than four to one in ratio with phosphorus. The "main and essential ingredients" clearly are phosphorus and copper. The addition of tin has no practical effect, and therefore should not take the solder from under Claims 1 and 3. See Graham's testimony (Record—p. 11-12). The addition of minor ingredients not included in the claims that do not change the characteristics or alter the functional effects of the patented composition will not avoid a charge of infringement of patent.

(26) This exception is directed to the court's second conclusion to the effect that defendant's copper-phosphorus-silver solder is within the scope of Claims 1, 2, 3, and 4 of the Jones Patent and therefore comes under the terms of the license agreement. Dismissed.

At a time not made certain by the record, MacGregor developed his copper-phosphorus-silver solder and com-
[fol. 311] menced to market it. Plaintiff demanded payment of royalty thereon, which MacGregor refused, and at that time discontinued payment on his tin solder. The same requirements which apply to the inclusion of copper-phosphorus-tin solder within the claims of the Jones Patent apply to the inclusion of the copper-phosphorus-silver solder made by MacGregor. The difference in composition between the copper-phosphorus-tin and the copper-phosphorus-silver solders is that instead of having .5% of tin, MacGregor added 2% of silver to the Jones solder and increased the phosphorus to 7.5% (Record—p. 108 and 117). This change reduces slightly the point at which the resultant solder begins to melt, but does not substantially change its characteristics, uses, or operative results as compared to the Jones solder made without silver. (Testimony of Graham—Record—11-12 and 163.) There is evidence that the plaintiff's copper-phosphorus-tin solder and defendant's copper-phosphorus-silver solder are interchangeable, sold in direct competition, for the same uses by the same customers, and the advantages or disadvantages of the small amount of added silver are inconsequential. (Record—p. 115-116, and p. 11-12.) Claims 2 and 4 of the Jones Patent describe defendant's silver solder without any qualification

or change of wording. Claims 1 and 3 cover this solder because the silver added does not specifically change the copper-phosphorus-solder described in these claims.

[fol. 312] (27) This exception is directed to the court's third conclusion—that MacGregor is obligated to account for all of the licensed solders and to pay royalty thereon as specified in the agreement. Dismissed.

The license contract is valid and the defendant has recognized said contract as in effect.

(28) This exception is directed to the court's fourth conclusion to the effect that the plaintiff is entitled to an accounting. Dismissed.

Having found the contract valid and the defendant having admittedly refused to pay the royalty and account for his sales, this conclusion follows logically.

(29) This exception is directed to the court's fifth conclusion—that the license agreement, Exhibit 2, does not obligate MacGregor to fix resale prices of the licensed solder. Dismissed.

This is established by Clauses 5 and 6 of said agreement.

(30) This exception is directed to the court's sixth conclusion—that since the price-fixing clauses (5 and 6) of the license contract have not been asserted in this suit, the legality and enforceability thereof raise moot issues. Dismissed.

This conclusion is correct if the court's interpretation of the Sola case is correct. The Sola case is fully discussed by the trial judge in the findings and discussion made part hereof.

[fol. 313] (31) This exception is directed to the court's seventh conclusion—that since the Jones patent is presumptively valid, the price-fixing clauses 5 and 6 of the license agreement are presumptively legal. Dismissed.

There is a presumption that a patent duly issued by the United States Patent Office is valid and enforceable. There has never been any question of the legality of a price-fixing clause based upon a valid patent. The Sola case does not deny this, but as we interpret it it holds that where a patentee attempts to enforce a price-fixing clause, the public interest in preventing improper price-fixing justifies the Court in permitting the defendant to attack the enforce-

ability of the price-fixing clause by attacking the validity of the licensed patent. No such condition exists in the present case—the price-fixing clause not being involved in plaintiff's statement of claim.

(32) This exception is directed to the court's eighth conclusion—that the case of Jefferson v. Sola, 63 Supreme Court 172, does not give the instant defendant a right to challenge validity of the price-fixing clauses of the license agreement. Dismissed.

This exception involves an interpretation of the Sola case. This is fully discussed by the trial judge in the findings, discussion and conclusions which are made part hereof. With the interpretation as there developed, we agree.

[fol. 314] (33) This exception is directed to the court's ninth conclusion—that defendant, being a licensee, and the price-fixing clauses not being in suit, is estopped to attack validity of the patent. Dismissed.

That a licensee is estopped to attack the validity of the patent under which he enjoys a license is established by a long line of cases. Unless this principle is changed by the Sola case—and we have held it is not—the law as stated applies.

(34) This exception is directed to the court's tenth conclusion—that the price-fixing clauses 5 and 6 of the contract are divisible subject matter, and could be stricken out with no effect on the obligation to pay royalty. Dismissed.

Even if the price-fixing clauses were per se unenforceable or illegal, this would not render the agreement as a whole illegal and would not make the remaining provisions of the license agreement unenforceable. The "Blue Pencil Rule" is applicable. *Williston on Contracts*, 1937 Edition, Section 1659. The Supreme Court of Pennsylvania recognizes the so-called "Blue Pencil Rule." *Smith's Appeal*, 113 Pa. 579; *Monongahela, etc. v. Jutte*, 210 Pa. 288.

(35) This exception is directed to the court's eleventh conclusion—that as between the parties to the instant suit the Jones Patent is valid, and the license agreement legal and enforceable. Dismissed.

All of the court's findings and conclusions lead inevitably to this conclusion.

(36) This exception is directed to the court's twelfth conclusion—that there is no support in the pleadings or [fol. 315] the evidence for defendant's counterclaim. Dismissed.

Defendant's counterclaim seeks repayment of money paid under the license agreement on MacGregor's copper-phosphorus-tin solder, on the theory that such payments were made by mistaken belief that the Jones Patent is valid, and covers MacGregor's copper-phosphorus-tin solder. No evidence was introduced by the defendant to establish any mistake of fact. If any mistake existed it was mistake of law. Defendant's counterclaim also asks damages under the Federal Anti-Trust acts. The court found that it had no jurisdiction to grant damages for violation of federal statutes.

(37) This exception is directed to the court's thirteenth conclusion—that royalties paid by defendant were properly paid and were not paid by mistake, and defendant has no right to restitution. Dismissed.

This question has already been discussed.

(38) This exception is directed to the court's fourteenth conclusion—that if there was a mistake in paying royalties it was a mistake of law and no recovery can be had thereon. Dismissed.

This matter has been considered in connection with the 13th exception.

(39) This exception is directed to the court's fifteenth conclusion of law—that there has been no such violation of the Sherman Act pleaded or proved by the defendant as to constitute a defense to this suit for royalties. Dismissed. [fol. 316] The Sherman Act cannot be involved in the instant suit which is predicated upon a contract in a State court, in the county in which both parties are residents.

(40) This exception is directed to the court's sixteenth conclusion—that it has no jurisdiction to award damages for violation of the Sherman or other federal anti-trust acts. Dismissed.

The Sherman Act gives exclusive jurisdiction of such matters to the federal courts.

(41) This exception is directed to the court's seventeenth conclusion—that judgment should be entered ordering defendant to render an accounting. Dismissed.

This is in accord with findings of fact and conclusions of law made by the court, and is based upon same.

(42) This exception is directed to entry of judgment pursuant to the seventeenth conclusion of law. Dismissed for the reasons cited in the 41st paragraph.

(43) This exception is directed to the refusal of the court to sustain defendant's proposed 1st to 10th, 12th and 13th conclusions of law. Dismissed.

The first six conclusions requested by defendant are based on the alleged illegality of the license contract because of the alleged fixing of resale prices. The court found that there was no fixing of resale prices; that the price-fixing clauses were not involved in the instant suit; and that the [fol. 317] contract was legal and enforceable. These questions have already been discussed. The proposed conclusions of law 7, 8 and 9 are that the Jones Patent does not validly cover defendant's products. These are inconsistent with the findings of the court and this has been previously discussed. The proposed tenth conclusion is to the effect that the license agreement is illegal and void as fixing competitive sales prices on solders moving in inter-state commerce. The court has found otherwise. Defendant's proposed twelfth and thirteenth conclusions are to the effect that defendant should recover the royalties it has paid under the contract as having been paid by mistake, and that defendant should have judgment therefor. This has been considered in connection with the alleged mistake of fact in the discussion on the 13th exception.

In Re: Rulings on Evidence

It is vigorously argued by counsel for the defendant that the court by its rulings on evidence prevented the defendant from establishing his case. If that is true, certainly a new trial should be granted. We shall therefore consider most carefully the exceptions directed to rulings on evidence.

(44) This exception is directed to a ruling on evidence appearing in the record at pages 15 and 16. Dismissed.

The statement under this exception as to the nature of the testimony offered and the court's ruling is misleading [fol. 318] and incorrect. Defendant's counsel did not make any such offer on page 15 as that stated in the present exception and the court did not make the ruling on page 16 that is stated in connection with the exception. The question objected to was directed to subject matter outside the scope of the direct examination which, if material at all, is a part of defendant's case. In our judgment the objection to the specific question was properly sustained. The court made no general ruling as to the scope of cross-examination.

(45) This exception is directed to a ruling in the record at page 20 which apparently is not before the court because after the objection and ruling quoted in connection with said exception, defendant's counsel withdrew the question. This, in our judgment, waived the present exception which is DISMISSED.

(46) This exception is directed to the court's ruling on evidence appearing in the Record at page 22. The question quoted occurred in cross-examination immediately after plaintiff's witness Graham had testified that he had not tested any MacGregor alloys containing 2% phosphorus. He was then asked the question quoted in this exception. This was objected to and objection sustained. The question asked was purely hypothetical. Any answer thereto is immaterial since it had been established that defendant's solders and plaintiff's commercial solder contain substantially the same amount of phosphorus, namely, about 7%, and the witness having testified that he had made no test [fol. 319] on the solder containing only 2% phosphorus. This exception is DISMISSED.

IN RE: MOTION TO DISMISS

(47) This exception is directed to the court's refusal (appearing in the Record at pages 25 and 26) of defendant's motion to dismiss on the ground that plaintiff had not proved infringement in its prima facie case. DISMISSED.

In its prima facie case the plaintiff established that defendant's solders contained approximately 7% phosphorus and approximately 92% copper. One of the solders contained in addition one-half of 1% of tin and the other contained 2% silver. The Jones Patent had been offered in

evidence as plaintiff's Exhibit 1. Claim 4 of that patent calls for a solder comprising copper and phosphorus as the main and essential constituents thereof—the ratio of copper to phosphorus being greater than 4 to 1. Obviously the two MacGregor solders were within the scope of the patent and there is affirmative testimony in plaintiff's case to this effect. The license contract sued upon by the plaintiff is Exhibit 2. It specifically provides that MacGregor shall pay royalty upon any brazing solder made by him "embodying the inventions described and contained in said Letters Patent." It was established that defendant had taken a license to settle an infringement suit in the federal courts, and for years had paid royalty on his copper-phosphorus-tin solder. In our judgment the motion to dismiss [fol. 320] was properly refused—plaintiff having established a prima facie case. There was evidence to show that MacGregor had refused to pay royalties and to permit his accounts to be examined.

IN RE: RULINGS ON EVIDENCE

(48) This exception is based on alleged error of the trial judge (Record—p. 34) in refusing to admit evidence that defendant was required to enforce the resale prices of defendant's solder. DISMISSED.

This exception is a misstatement of the trial judge's ruling. No competent evidence which defendant offered to show that plaintiff required defendant to fix resale prices was excluded. Under this exception defendant quotes a question addressed to Seastone, a witness called by defendant. Prior to that question the actual contract between the parties, the written correspondence between the parties regarding the contract and regarding the fixing of resale prices had been put in evidence, and the witness had been interrogated about the fixing of resale prices, and had testified that MacGregor had not been required to fix resale prices. The particular question referred to merely asked the witness if he had not complained about a New England distributor of MacGregor selling at less than list prices. The witness answered that he did not remember. Objection was made on the ground that in view of the preceding testimony of the witness the question was cross-[fol. 321] examination and that answer to this specific case was immaterial. Since the answer was reported and not

stricken out, even if the court's ruling were wrong, there would be nothing prejudic-al to defendant.

(49) This exception is based upon the alleged refusal of the court (Record—p. 36) to admit evidence that the Westinghouse Company fixed the resale prices of its patented solder. DISMISSED.

No such general ruling was made by the court. The alleged error cited under this exception is the ruling on a specific question asked by defendant of his own witness as to whether Westinghouse had furnished certain price lists to its own distributors. This was objected to as immaterial and was sustained. Since the instructions of Westinghouse to its agents and distributors is not an issue in this case, the ruling was correct.

(50) This exception is based on the alleged error of the trial judge (Record, p. 47-48) to admit evidence that Westinghouse required MacGregor to fix resale prices. DISMISSED.

No such general ruling was made by the court. Defendant did offer evidence and argued at length on this subject. The specific ruling was on a question asked in re-direct examination which is set out in the exception. The objection was directed to the fact that the matter contained in said question had been fully covered on direct examination. The objection to the ruling was proper.

[fol. 322] (51) This exception is based on alleged error of the trial judge (Record—p. 159) in refusing to admit evidence that Westinghouse has violated the Sherman federal Anti-Trust Laws by requiring its dealers to maintain resale prices. DISMISSED.

The question at page 159, by defendant's counsel to defendant's own witness, asked the witness to tell the court the nature of "an agreement in the form of 18349, Sheets 1 and 2"—referred to in a paper which defendant had put in evidence. The objection (Record—p. 160) was directed to asking the witness "the nature of" a contract or written paper which was not before the Court. Defendant had not called for the document referred to, although reference to it was in defendant's exhibit. To attempt to prove a written paper by parol testimony under such circumstances was improper. At pages 160 and 161 certain other specific questions were objected to as irrele-

vant and immaterial, and the objection sustained. These questions related to the practice of the Westinghouse Company in its relation to its own agents and distributors, which is obviously immaterial to the issues of the instant case.

(52) This exception is directed to the refusal of the trial judge (Record—p. 94-96) to admit evidence of damages allegedly sustained by defendant by reason of plaintiff's alleged unlawful price fixing. DISMISSED.

Defendant's counsel proposed to offer proof to show damages accruing under Section 7 of the Sherman Act. [fol. 323] Preliminary to this he read into the record (p. 95) a portion of that Act which says that a person damaged by violation of the Sherman Act may *"sue therefor in any Circuit Court of the United States."* Defendant's counsel then proposed to show damages recoverable under that act in a State court. We believe this offer to have been properly refused.

(53) This exception is directed to the court's alleged refusal (Record—p. 66) to admit evidence that the claims of plaintiff's patent include within their scope the eutectic of copper and phosphorus disclosed in the Gulliver publication (DX-H) and canceled from the patent during its prosecution. DISMISSED.

The court did not sustain plaintiff's objection. The question was answered (Record—p. 67).

(54) This exception is directed to the alleged error of the trial judge in refusing to admit evidence of the prior art in anticipation of the invention of the patent. DISMISSED.

The court did not exclude any evidence of the prior art offered by the defendant in this case. The specific subject matter cited under this exception is a question found on page 69, reading as follows:

> Do you find in that publication (DX-H) a description of the eutectic of copper and phosphorus alloys?

This question goes to what is in the particular publication and is not an offer of the publication itself. This does not raise the issue stated in the exception. At page 72 of [fol. 324] the Record appears the objection as follows:

Mr. Brown: Objected to as immaterial. It is a written publication and it is the best evidence.

Since the witness was being asked what was contained or shown by a publication that was in evidence and before the court, the objection was properly sustained.

(55) This exception is directed to the alleged refusal of the trial judge (Record—p. 72) to admit evidence showing that the publication by Gulliver (DX-H) discussed the alloy of the plaintiff's patent. DISMISSED.

The specific ruling of the court cited under this exception does not relate to the subject matter of the exception. The question quoted from page 72 is directed to asking the witness whether he finds a certain formula in the Gulliver publication. The Gulliver publication was offered in evidence with the approval of plaintiff's counsel. Mr. Jaspert was asked in this connection: (Record—p. 70).

Are you attacking the validity of the Jones patent?

He answered:

At this point I am not.

At page 72 objection was made to Exhibit H "insofar as it is offered for the purpose of attacking the validity of the patent in suit." Apparently that is the objection which was sustained. Exhibit H was received, was treated as [fol. 325] an exhibit throughout the trial, and is the basis of several findings proposed by defendant. It is fully considered by the trial judge in discussing the prior art.

(56) This exception is directed to the alleged refusal of the trial judge (Record, p. 73) to admit evidence to show that the patented claims include subject matter covered by claims that had been canceled during the Patent Office prosecution. DISMISSED.

The specific question which is the basis of the exception was withdrawn after the court's ruling (Record, p. 74). This waives the exception. The objection was made that the question was indefinite and the court's ruling was that it had already been answered.

(57) This exception is directed to the alleged refusal of the trial judge (Record, p. 76) to admit evidence that in the prosecution of the application for the Jones Patent the inventor had distinguished his invention from that of the Canzler Patent by pointing out that plaintiff's solder does not contain silver, etc. DISMISSED.

The specific ruling of the court Record—p. 76) was that of the Canzler Patent (Exhibit C) was ruled out only insofar as it was offered for the purpose of attacking the validity of the Jones Patent. It was admitted to show prior art. Unless defendant's position regarding the Sola case is correct, the court was right in refusing to allow defendant [fol. 326] to introduce evidence to attack validity of a patent under which he retained and still retains a license.

(58) This exception is directed to the alleged error of the trial judge in refusing (Record—p. 77) to admit evidence of similarity between defendant's solder and the solder disclosed in the Canzler Patent. DISMISSED.

The specific ruling cited under this exception does not support it. The question asked MacGregor required him to compare the solder "in your patent and the Canzler Patent." The objection—technical in nature—was that this called upon the witness to compare documents and tell the court what was in them. On this basis the objection was sustained. In addition, it is pertinent to point out that at the Record, p. 93-94 counsel for plaintiff withdrew the objection to testimony about the teaching of the Canzler patent, before defendant had excused MacGregor from the stand.

(59) This exception is directed to overruling defendant's objection (Record, p. 166) to a question calling upon plaintiff's witness Graham to state his understanding of the disclosure of the Canzler Patent, i. e. as to the amount of phosphorus it teaches. DISMISSED.

The Record, pages 93-94 discloses that before defendant's testimony was closed plain-'s counsel had specifically withdrawn his objection to having the witness MacGregor testify to the disclosure of the Canzler Patent. Therefore this exception is not well taken.

[fol. 327] (60) This exception is directed to the alleged refusal of the trial judge (Record, p. 78) to admit evidence establishing utility of defendant's silver solder. Dismissed.

The witness was asked why he used phosphorus in his copper-phosphorus-silver alloy. This was objected to as immaterial and the objection sustained. The record had already established that defendant used substantially the same amount of phosphorus as that called for by the Jones Patent, and that the resulting solder had substantially all

of the attributes, uses, and advantages of the patented solder. What the defendant might say as to his purpose in utilizing phosphorus was therefore immaterial. The utility of defendant's solders was not in issue and not disputed.

(61) This exception covers sustantially the same matters considered in the discussion of the 60th Exception. Dismissed.

(62) This exception covers substantially the same matters considered in the discussion of the 60th Exception. Dismissed.

(63) This exception is directed to the alleged refusal of the trial judge to admit evidence establishing definite characteristics of defendant's solder as distinguished from plaintiff's solder. Dismissed.

The rulings of the court (Record, p. 81-82) cited to support this exception fail to sustain it. The questions were objected to as leading. That objection was sustained. The substance was not involved in the court's ruling.

[fol. 328] (64) This exception is directed to the striking out (Record—p. 82) as voluntary and unresponsive an answer made by defendant under cross-examination. His answer begins with the sentence: "I would say no." Having fully answered the question, he proceeded to enlarge upon the matter and the motion to strike was granted. Even if the answer is in the record, it makes no difference.

(65) This exception is directed to the trial judge's alleged refusal (Record—p. 147-149) to admit evidence showing that the percentage of copper and phosphorus defined in the Jones Patent was indefinite and possessed no utility whatsoever. Dismissed.

This exception does not correctly state the ruling of the court. The specific question involved was a purely hypothetical expert question, involving no composition used by either party. The objection was directed to the fact that the question called for the opinion of an expert and that the witness had expressly disclaimed being an expert in this art. We quote from the Record, p. 97:

> Q. Please understand, Mr. MacGregor, that I have no desire whatever to humiliate you in any way. As

I understand, you do not pose as a technical and metallurgical expert in this art?

A. I am not an expert.

Q. You disclaim that?

A. Yes.

[fol. 329] See also Record, p. 112. We believe that the objection was properly sustained.

(66) This exception is directed to the alleged refusal of the trial judge (Record, p. 150) to admit evidence showing that the range of copper and phosphorus claimed by the Jones patent has no utility as a solder. Dismissed.

The court made no such ruling. The portion of the record cited by defendant under this exception has no relation to the substance of the exception stated. This appears from the question at page 150 quoted to support this exception.

(67) This exception is directed to the trial judge's alleged refusal (Record, p. 151) to admit evidence showing that the percentages of phosphorus specified in the Jones Patent, other than those stated in cancelled claims, have no practical utility. Dismissed.

This is a misinterpretation of the court's ruling. The Record, p. 151, cited under this exception shows that the specific question ruled upon was:

> Mr. MacGregor, would a phosphorus-copper alloy having a 10% phosphorus content be a suitable soldering material?

The objection addressed to that question was that it was irrelevant and immaterial and an expert question addressed to a witness who had disclaimed being an expert, therefore calling for an immaterial conclusion or opinion. The objection was properly sustained.

[fol. 330] (68) This exception is directed to the alleged refusal of the trial judge (Record, 151-154) to admit evidence that only one alloy disclosed in the Jones patent is suitable for soldering. Dismissed.

This exception misinterprets the ruling of the court which was that the several specific questions objected to were directed to an irrelevant and immaterial subject matter. Further, the witness disclaimed being an expert, and these questions were hypothetical questions calling for the conclusions of an expert.

(69) This exception is directed to the alleged refusal of the trial judge (Record, page 174) to admit evidence that the range and melting temperature in Claims 2 and 3 of the Jones Patent are indefinite and lack utility. Dismissed.

Plaintiff's witness Graham was asked if he would know the percentage of phosphorus in a copper-phosphorus alloy that melts at 797°. The question was objected to as outside the scope of the direct examination, the witness having been asked no questions on direct examination that made the specific cross-examination pertinent or material. Before there was any ruling, Mr. Jaspert stated that he would like to ask a different question, and did so. Consequently there was no ruling on the first quoted question. The second question referred to three different specific melting points. The court stated that it felt the substitute question would not be fair because "you have a different melting [fol. 331] point each time." No attempt was made to modify the question, and no question was ruled out that justifies the 69th Exception.

ORDER OF COURT

And now, to wit, January 24, 1944, exceptions ex parte defendant to findings of fact, conclusions of law, and order of court are dismissed.

The Prothonotary is directed to enter Judgment ordering and directing that the defendant render an account to the plaintiff (a) for all sales of brazing solders containing tin manufactured, and, since January 1, 1940, to the date of such accounting, sold by the defendant, all such solders being covered by U. S. Letters Patent No. 1,651,709 issued by the United States Patent Office to the plaintiff as assignee, and (b) for all sales of brazing solders containing silver manufactured, and, since November 16, 1937, to the date of such accounting, sold by the defendant, all of same being covered by said U. S. Letters Patent No. 1,651,709; that the plaintiff have the right to inspect the books and papers of the defendant; and that such account be rendered by the defendant within thirty (30) days from the date of judgment.

By the Court.

Eo die, exception noted to defendant and bill sealed.

Sara M. Soffel, Trial Judge. (Seal.)

[fol. 332] IN COURT OF COMMON PLEAS

PRAECIPE FOR JUDGMENT—Filed February 19, 1944

To David B. Roberts, Esq., Prothonotary.

SIR:

Enter judgment in favor of the plaintiff and against the defendant in the above entitled case in conformity with the order of court made and entered on January 24, 1944, such judgment to be noted on the appearance docket as of January 24, 1944, so as to conform to the judgment entered as of the same date in the judgment index docket.

Smith, Buchanan & Ingersoll, William Booth, Attorneys for Plaintiff; William B. Jaspert, Attorney for Defendant.

February 19, 1944.

IN COURT OF COMMON PLEAS

JUDGMENT

January 24, 1944, Judgment entered in favor of the plaintiff and against the defendant in conformity with the Order of Court made and entered January 24, 1944.

David B. Roberts, Prothonotary, by S. A. Fritz, Deputy.

JESSE L. JONES, OF EDGEWOOD PARK, PENNSYLVANIA, ASSIGNOR TO WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY, A CORPORATION OF PENNSYLVANIA.

SOLDER.

No Drawing. Application filed June 30, 1921. Serial No. 481,613.

This invention relates to solders, more particularly to a brazing solder adapted for various uses including brazing rotor bars to end rings to form the rotors of induction motors.

Hitherto, in applications of this kind, the various elements were brazed by means of the ordinary brazing solder which consisted generally of copper and zinc in equal proportions. This solder, commonly known as hard solder, has a relatively high melting point, considerably over 1000° C. When heated to the high temperature necessary to melt the solder, a considerable proportion of the zinc volatilizes and oxidizes to form a film of zinc oxide on the material being brazed which tends to impair the efficiency of the joint.

Since the melting point of the solder is high, it is necessary to heat the material, generally by means of a gas flame, to a temperature above 1000° C. and generally in the neighborhood of 1100° C. for a considerable length of time. The long period of contact of the copper forming the elements of a rotor with the hydrocarbon gases causes considerable hydrogenation of the copper due to the absorption of hydrogen from the flame into the interior of the copper bars and rings. The high temperature and the long period of heating may also cause material warping of the finished rotor, necessitating a machining operation in order to restore the same to the proper form.

The present invention is designed to provide an improved solder, it being among the objects thereof to provide a brazing solder which shall have a low melting point, which shall be hard, tough and strong, which shall not oxidize and which shall have a high degree of fluidity in order to penetrate between the surfaces to be brazed.

In practising my invention, I provide an alloy of copper and phosphorus, usually containing less than 10% of phosphorus. I have found that such low-phosphorus copper alloys, more specifically the eutectic alloy which melts at about 707° C. and contains about 8.27% of phosphorus, are especially suitable for brazing copper or copper alloys. This material is hard, tough, and strong, has a relatively low melting point and is capable of flowing freely into cracks and joints to be brazed.

A specific application of this solder is as follows: In brazing rotor bars to end rings to form the rotors of induction motors, the end rings are formed with annular grooves, and a series of holes are punched therein. Rotor bars are inserted in said holes and pieces of solder placed in the grooves. A single flame, usually an acetylene torch, is directed on the annular groove containing the phosphorus copper alloy which preferably contains 6 to 9% phosphorus, quickly melting the same and causing it to flow into the spaces between the bars and end rings. On account of its fluidity, the solder fills all the crevices to form an efficient joint, both mechanically and electrically.

Since the melting of the alloy may be accomplished by a single flame or blow-torch, the danger of warping the rotor by heat is practically avoided. In using the ordinary copper-zinc s lder, it is necessary to provide a furnace hav.ng a series of burners directed upon the rings which are rotated in order to uniformly heat the same. By utilizing my new solder, the necessity for such a furnace is eliminated, since a single hand torch is all that is necessary to braze the material. Because of the much lower temperature of brazing, a considerable saving is effected in the cost of fuel.

When brazing copper with the new solder, no flux is necessary but when brazing brass, it is desirable to use a flux of borax and microcosmic salt or similar material in order to neutralize the effect of zinc oxide which is formed during the brazing operation.

Although I have described specifically the use of my phosphorus-copper brazing solder for forming rotors of induction motors, it is obvious that this is but one of the numerous applications for my new material. For instance, I may braze the copper resistor bars used in immersion-type heaters, thus providing a material which does not corrode in water and other liquids. Various percentages of phosphorus in the alloy may be utilized but, preferably, I restrict myself to an alloy containing 10% or less phosphorus.

I claim as my invention:

1. A brazing solder which consists of an alloy of substantially 6 to 10% phosphorus and the remainder copper.

2. A brazing solder having a melting point between 700° and 900° C. containing

phosphorus and copper as the main and essential constituents thereof.

3. A brazing solder having a melting point between 700° and 900° C. consisting of phosphorus and copper.

4. A solder comprising copper and phosphorus as the main and essential constituents thereof, the ratio of copper to phosphorus in said solder being greater than 4 to 1.

5. A method of uniting objects of copper which comprises placing an alloy containing copper and 6 to 9% of phosphorus therebetween and heating said objects to a temperature sufficient to form alloys of copper and phosphorus with said objects.

6. A method of uniting objects of copper alloys which comprises placing an alloy containing copper and 6 to 9% of phosphorus therebetween and heating said objects to a temperature sufficient to form alloys of copper and phosphorus with said objects.

In testimony whereof, I have hereunto subscribed my name this 22nd day of June, 1921.

JESSE L. JONES.

UNITED STATES PATENT OFFICE.

CARL CANZLER AND RICHARD SAMESREUTHER, OF DÜREN, GERMANY, ASSIGNORS TO AUTOGENWERK SIRIUS, GESELLSCHAFT MIT BESCHRÄNKTER HAFTUNG, OF DUSSELDORF, GERMANY, A FIRM.

ALLOY FOR WELDING COPPER AND NICKEL.

1,103,482. Specification of Letters Patent. Patented July 14, 1914.

No Drawing. Application filed September 24, 1913. Serial No. 791,490.

To all whom it may concern:

Be it known that we, CARL CANZLER and RICHARD SAMESREUTHER, both subjects of the German Emperor, and residents of Düren, Rhineland, Germany, coppersmiths, have invented a new and Improved Alloy for Welding Copper and Nickel, of which the following is a specification.

Hitherto in welding copper phosphorus was generally employed as a reducing agent for preventing an oxidization of the copper. This phosphorus was applied to the welding either in form of phosphorous copper wire or of a phosphorous powder, which was strewn on the joint during the welding operation. The results obtained were, however, not satisfactory as regards the quality of the welded joint. With the object of obtaining better results, a copper wire has in recent times been used, which contained, beside the phosphorus, also tin and zinc at varying percentages. But neither by such means an absolutely perfect welded joint was obtainable, on the contrary, the joint is generally brittle and does therefore not allow of being conveniently worked.

According to the present invention a copper wire shall be used for such welding operations, which contains besides the amount of phosphorus necessary for the welding operation, also silver in quantities up to five per cent. In place of the silver, cadmium, bismuth, or an alloy of any or all of these metals may be employed, the cadmium, silver and alloys, being an equivalent of the silver for the purposes of this invention. The joints welded with such a binding agent or alloy of copper and silver show an extraordinary strength and elasticity. The welded joints may be worked in a heated condition. The alloy may be also employed in the same manner for welding nickel, which is an equivalent of copper, for the purposes of this invention.

We claim:

1. An alloy for welding copper which consists of the same metal as a base, phosphorus and a small percentage of silver.

2. An alloy for welding copper, which consists of an alloy made in the form of a wire and consisting of the same metal as a base, phosphorus and a small percentage of silver.

In testimony whereof, we hereto affix our signatures in the presence of two subscribing witnesses.

CARL CANZLER.
RICHARD SAMESREUTHER.

Witnesses:
LOUIS VANBORY,
OSCAR DEPPNER.

JOSEPH N. DAUDELIN, OF ST. HYACINTHE, QUEBEC, CANADA, ASSIGNOR TO HORACE DUSSAULT, OF LEVIS, CANADA.

SOLDER.

989,573. Specification of Letters Patent. Patented Apr. 18, 1911.

No Drawing. Application filed May 31, 1910. Serial No. 564,034.

To all whom it may concern:

Be it known that I, JOSEPH N. DAUDELIN, a subject of Great Britain, residing at St. Hyacinthe, in the Province of Quebec, Canada, have invented certain new and useful Improvements in Solder; and I do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention to be hereinafter described relates to solders and more particularly to a solder adapted to join practically all the common or well known metals, including especially aluminium.

Broadly speaking, it comprises a mixture of silver, phosphorus, copper, lead, tin, aluminium, and zinc; in certain approximate proportions.

In order to more clearly disclose the composition of the invention, and the method of mixing the various ingredients, reference should be had to the following description setting forth the same in its preferred form, according to extensive experiments and experience.

The main objects of the invention are to provide a solder having great tensile strength, one which will run easily, one which may be used equally well on aluminium and many other metals in common use, one which has a very low coefficient of expansion, one which is homogeneous throughout, one which will not easily corrode, one which will give a smooth, even surface, and one presenting great toughness without being brittle.

By actual experience and a long series of careful experiments and tests the following materials in about the proportions given have been found to be the best combination to obtain the desired result: 22 grains of silver, 42 grains of phosphorus, 238 grains of copper, 1338 grains of lead, 5051 grains of tin, 50 grains of aluminium, 939 grains of zinc.

The silver hardens and adds strength to the solder. More than this proportion of silver raises the fusing point of the solder so that it will not run easily when used with a soldering iron. A smaller proportion does not give the required strength. The hardening effect of the silver is particularly desirable during the casting operation when the solder is being formed into bars and the like.

The phosphorus acts as a combining or intermixing agent. It makes a more homogeneous composition; one of greater uniformity throughout. This, of course, gives a smooth surface or finish and a more uniform joint when the solder is used. A less proportion of phosphorus produces a solder of a higher fusing point and therefore less workable with the soldering iron. More phosphorus weakens the solder so that it disintegrates and does not last so long.

The copper acts to toughen the solder and render it less brittle so that the seam or joint will stand working without injury, after it is soldered. The copper also acts to prevent corrosion. A greater proportion of copper will raise the fusing point of the solder so that it will be unworkable, or, at least, very hard to work with a soldering iron. A greater proportion of copper will also decrease the adhesive properties of the solder. A smaller proportion of copper renders the solder less tough, makes it more subject to corrosion, and gives a much weaker joint.

The lead makes the solder run freely and adhere to the joints of most of the known metals, except aluminium. A greater proportion of lead makes the solder weak, too easily fusible, and partially destroys its adhesive qualities. A smaller proportion of lead acts reversely.

Tin is used as the body or foundation of the solder and should not be materially changed from the proportion given, if the best results are to be obtained.

Aluminium is used to enable the solder to adhere to aluminium metal so that the solder may be used in making joints of pieces of aluminium metal as well as in making joints of pieces of other metals. A greater proportion of aluminium renders the solder somewhat disintegrated and less homogeneous, while a less proportion of aluminium will decrease the ability of the solder to adhere to aluminium.

The zinc is used as customary in solders, to assist in adhesion of the solder to other metals. Zinc will insure adhesion to the great majority of common metals, except aluminium.

In making the solder, the silver, copper, phosphorus, tin, and aluminium are all put

into a melting pot or crucible and thoroughly melted. Then the lead and zinc are put into these molten metals and so fused. Or, if desired, the two groups of metals are melted separately and then, while molten, are mixed together. The reason for melting the silver, copper, phosphorus, tin, and aluminium, separately, is because of their high melting points. If the lead and zinc were placed in the same crucible for simultaneous melting they would be almost completely volatilized before the silver, copper, phosphorus, tin, and aluminium had begun to fuse.

It is thought that the ingredients and method of preparation, and use of the invention will be clear from the preceding detailed description.

Slight changes may be made in the variations of the proportions given without departing from the field and scope of the invention, and it is meant to include such within this application wherein a preferred form has been disclosed.

Having thus fully described my invention, what I claim as new and desire to protect by Letters Patent is:

A solder of the character described consisting of a mixture of silver 22 grains, phosphorus 42 grains, copper 238 grains, lead 1338 grains, tin 5051 grains, aluminium 50 grains, and zinc 939 grains.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

JOSEPH N. DAUDELIN.

Witnesses:
L. A. GAUVIN,
E. J. GAUVIN.

UNITED STATES PATENT OFFICE.

CARL W. MAXON, OF BAY CITY, MICHIGAN.

ALLOY FOR SOLDERING OR BRAZING.

SPECIFICATION forming part of Letters Patent No. 532,890, dated January 22, 1895.

Application filed November 7, 1894. Serial No. 528,136. (No specimens.)

To all whom it may concern:

Be it known that I, CARL W. MAXON, a citizen of the United States, residing at Bay City, in the county of Bay and State of Michigan, have invented certain new and useful Improvements in Alloys for Soldering or Brazing, of which the following is a specification.

This invention relates to improvements in alloys for soldering or brazing and pertains especially to an alloy of metals to form a suitable composition for soldering or brazing aluminum.

The invention consists in a composition of several metals united together as I shall hereinafter particularly describe and which will also be set forth in the claim of this specification.

The object of my invention is to provide an alloy or composition of metals, which, when subjected to a proper heat will fuse and unite with the surfaces of aluminum metal, and which can be used with sufficient heat in the same manner as ordinary solders upon other metals. In order to attain this object I take copper, four parts; silver, three parts; phosphorus, three parts; aluminum, three parts; zinc, five parts; lead, twelve parts; tin, thirty parts, and melt the [illegible] and cast into ingots [illegible]. The solder is then used with a blow pipe for imparting a high heat to the work and for melting the solder, and after the solder is melted upon the work it is moved and stirred about with a light tool held with the blow pipe flame impinged upon the tool and the work and the solder then unites with the surfaces of the work, and on cooling forms a firm and solid joint and has the natural bright color of aluminum which it retains without oxidizing or corrosion.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A solder for aluminum composed of copper, silver, phosphorus, aluminum, zinc, lead and tin melted together, substantially in the proportions specified.

In testimony whereof I affix my signature in the presence of two witnesses.

CARL W. MAXON.

Witnesses:
GEO. P. THOMAS,
F. A. MCKAY.

Aug. 2, 1938. A. R. MacGREGOR 2,125,680

ALLOY

Filed June 10, 1936

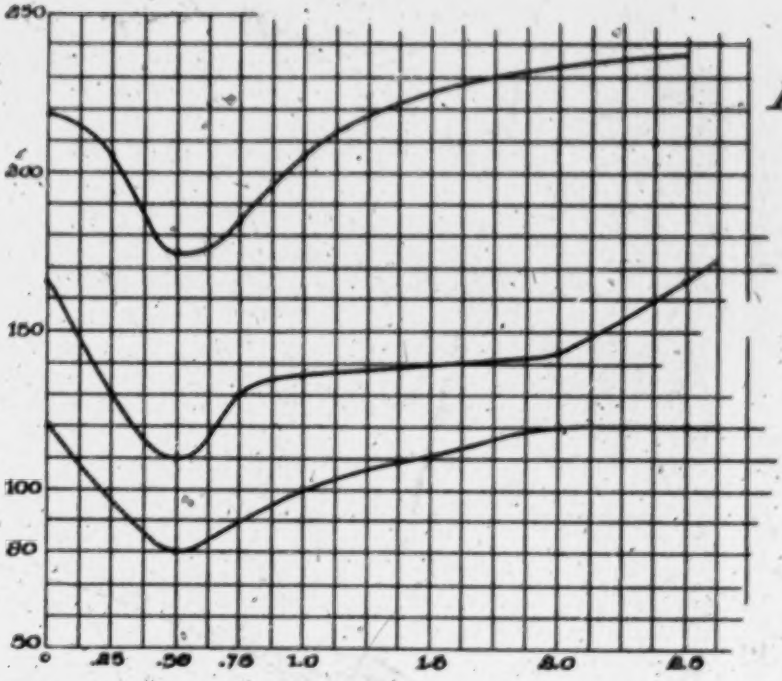

Fig. 1.

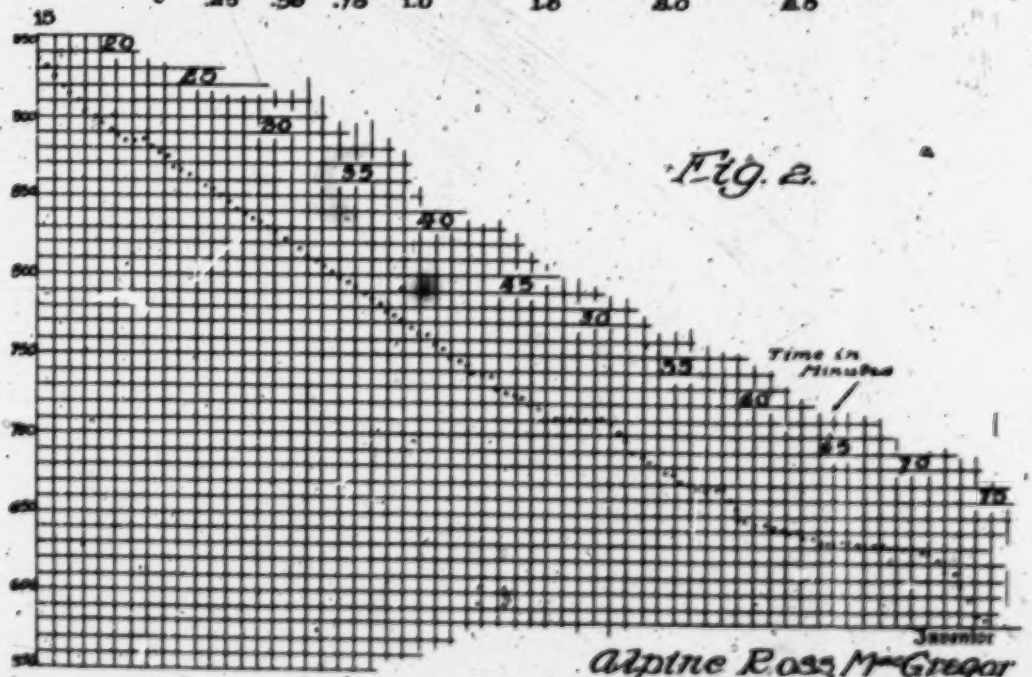

Fig. 2.

Alpine Ross MacGregor

L. E. Webster

Attorney

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ALLOY

Alpine Ross MacGregor, Forest Hills, Pa.

Application June 16, 1936, Serial No. 84,577

1 Claim. (Cl. 75—154)

My invention relates to copper base alloys suitable for use in welding, brazing, and soldering, and relates particularly to ternary alloys of copper, phosphorus, and tin adapted to be used for such purposes.

An object of my invention is to provide an improved alloy for the purposes set forth hereinabove.

A second object of my invention is to provide copper-phosphorus alloys having improved physical properties.

Another object of my invention is to provide an improved alloy containing copper and phosphorus, and adapted to use in welding, brazing, filling, and similar processes.

My invention has for other objects such other advantages as are found to obtain in the alloys described and claimed herewith.

It is well known that eutectic alloys generally have a relatively high degree of fluidity at temperatures above their melting points. Eutectic alloys of copper and phosphorus, for example, exhibit this characteristic to a marked degree, and such alloys have been used in the past for brazing, welding, and similar purposes. However, it has been found that the brittleness and low ductility of these alloys makes them unsatisfactory when ductile welds are desirable.

I have found that the addition of tin in the proper proportion to alloys of copper and phosphorus results in the formation of alloys having marked fluidity and at the same time possessing unusual ductility and softness. More specifically, I have found that alloys comprising copper, phosphorus, and tin, in which the percentage of phosphorus is less than or does not materially exceed that in the eutectic composition (about 8.3 per cent) and containing tin in amounts less than 1 per cent, are very satisfactory for use as welding or brazing media. These alloys result in a melt having high fluidity at the temperature of application, and form a weld or filling having unusually high ductility and softness, which allows them to be readily peened, machined, or otherwise dressed in the weld, or elsewhere. My alloys, furthermore, produce a strong, dense weld or braze capable of resisting high pressures, both gaseous and liquid.

As stated hereinabove, my preferred alloys of copper, phosphorus, and tin contain not more than about 8.3 per cent phosphorus, and I have found that a phosphorous content of about 6.5 to 7.5 per cent is especially desirable for general use for the purposes indicated. The use of tin in suitable proportions in accordance with my invention is also advantageous with copper alloys containing higher and lower percentages of phosphorus, however, and I have found that especially ductile welds are obtained by the use of an alloy containing about 4 or 4.5 per cent phosphorus. With alloys of this type having a phosphorous content ranging up to about 8.3 per cent, I have found that the most effective tin addition is about 0.5 per cent, and that in substantially all cases the maximum ductility is obtained by the addition of this amount of tin. Good results are also obtained by the addition of tin in amounts from about 0.25 per cent to about 0.75 per cent, but additions of tin in amounts less than about 0.2 per cent or more than about 0.85 per cent have relatively little effect on the ductility of the alloys as compared with additions within my preferred range. In fact, larger additions of tin may result in alloys having greater hardness and lower ductility than alloys of similar phosphorous content to which no tin is added, as shown hereinbelow.

The effect of tin on phosphorus-copper alloys is illustrated in the following tables, which give the Brinell hardness values of alloys, containing constant phosphorous proportions, as stated, varying amounts of tin, as stated, and the remainder substantially copper.

Table I

Per cent phosphorus	Per cent tin	Brinell hardness
4.0	0	120
4.0	0.5	80
4.0	1.0	100
4.0	1.5	110
4.0	2.0	120
4.0	2.5	120

Table II

Per cent phosphorus	Per cent tin	Brinell hardness
7.0	0	108
7.0	0.25	120
7.0	0.50	110
7.0	0.75	120
7.0	1.00	136
7.0	2.00	143
7.0	2.50	108

Table III

Per cent phosphorus	Per cent tin	Brinell hardness
8.3	0	219
8.3	0.25	206
8.3	0.50	175
8.3	0.75	184
8.3	1.00	206
8.3	2.00	222

The above values are plotted in Fig. 1 of the accompanying drawing. Entirely similar results

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are obtained when other percentages of phosphorus within the preferred range (from about 2 per cent to about 8.3 per cent) are used.

In addition to their improved ductility, I have also found that alloys of my preferred compositions have melting points considerably lower than that of the eutectic copper-phosphorus alloy, and are therefore more readily employable for welding, brazing, soldering, filling, and the like. For example, I have found that the ternary alloy containing 7 per cent phosphorus and 0.5 per cent tin with the remainder substantially copper begins to melt at approximately 631° centigrade, with pronounced periods of arrest in the cooling curve at approximately 634°, 663°, and 709°, being entirely liquid at about 885° centigrade, as shown in Fig. 2.

I have successfully used alloys described hereinabove for welding and brazing ferrous and non-ferrous parts by both the electric arc and the gas flame methods, for joining brass, bronze, and copper tubes and sheets, and for the repair and filling of cast objects, both copper base and iron base. However, due to the unique properties of these alloys they are adapted to many uses, and it is not my intention to limit their application to any particular form or to any particular purpose.

The alloys constituting my present invention may be prepared by processes analogous to those known to the art for the manufacture of other alloys. For example, I may melt phosphor-copper or a mixture of phosphor-copper and copper having the desired phosphorus content with the correct amount of tin, or I may melt the tin and copper together and then add the phosphorus. The resulting alloy in either case is then cast, drawn, rolled, or otherwise fabricated, into welding rods, electrodes, or other desired forms. It is generally more convenient to employ the alloy in such forms, but in any case a remarkably strong, dense, ductile weld is formed by the use of my alloys because of their fluidity, ductility, searching power, and strong adhesion to other metals.

I am aware that alloys of copper and phosphorus are known to the prior art as welding and brazing media, as disclosed, for example, in U. S. Patents 1,682,167 to Eschholz and 1,651,709 to Jones. I am also aware that ternary alloys of copper, phosphorus, and tin have been developed in the past, and such alloys, which are generally of the type known as phosphor-bronzes, have many uses. They have been used for welding, but do not produce the results obtained with alloys of my preferred composition because of their generally higher tin content and lower phosphorus content. Similarly, my alloys are distinguished from those disclosed in U. S. Patent 1,968,422 to Miller by their characteristically lower tin contents, which produce materially different results as shown hereinabove.

When welding with alloys of my preferred composition, some of the phosphorus is driven out and serves as an efficient deoxidizer, but enough remains to make the weld strong. The tin in the amounts specified overcomes the brittleness which would otherwise result from the presence of phosphorus, and makes it possible to peen or machine the weld, and the presence of tin in combination with the phosphorus makes tinning of the welded joint readily possible.

My new alloys may be employed in welding or brazing copper, iron, and the like without the use of a flux, but when brazing brass or other metals or alloys containing appreciable amounts of zinc I prefer to use a flux of borax or the like, in the manner known to the prior art.

I claim as my invention:

An alloy containing from 2 per cent to 8.3 per cent phosphorus and from 0.25 per cent to 0.75 per cent tin, the balance being substantially all copper.

ALPINE ROSS MacGREGOR.

UNITED STATES PATENT OFFICE

2,162,627

ALLOY

Alpine R. MacGregor, Forest Hills, Pa.

No Drawing. Application December 2, 1937, Serial No. 177,831

1 Claim. (Cl. 75—153)

This invention relates to welding, brazing or soldering and to alloys useful therefor. It relates especially to copper base alloys having compositions which make them exceptionally suitable for welding, brazing and similar applications, and having valuable characteristics for such applications.

Numerous attempts have been made heretofore to improve the properties of copper for welding, and more specifically to produce improved copper-base rods and wire for use in welding, soldering, and like operations. For this purpose it has been proposed to add varying amounts of phosphorus to the copper. It has also been proposed to add both silver and phosphorus to the copper, and two different types of alloy systems consisting of these three constituents have been suggested. In one type relatively large amounts of silver, such as 10 per cent to 25 per cent, are used with much smaller amounts of phosphorus to modify the copper base; and in the other type small amounts of silver are used with similar small amounts of phosphorus as additions.

The high-silver type of alloy is satisfactory in some respects, but is not as fluid at temperatures near its melting point as is desired for some purposes, and in addition produces a dark-colored weld which is objectionable in some circumstances. It is also, necessarily, quite expensive. The low silver and low phosphorus alloy also lacks fluidity and generally has a rather coarse structure, especially in the as-cast condition, which impairs its utility for many applications.

I have now found that the undesirable features of previously proposed copper-phosphorus-silver solders and welding alloys are not encountered with alloys having a silver content of about 1 to 3 per cent and a higher phosphorus content of about 7 to 8.5 per cent, with the balance substantially copper. An especially desirable composition contains about 2 per cent silver and 7.5 or 8 per cent phosphorus. Such compositions are easily made up and cast, and easily rolled from cast bars, etc., into the form of small rods or strips or wire.

A distinct advantage results from the high fluidity of my new alloy at relatively low temperatures. It may be readily demonstrated that the fluidity of this alloy is higher, and its melting point or temperature of application lower, than with previously proposed silver-phosphorus-copper alloys for this purpose. Another advantage is the very fine crystal structure, which seems to be peculiar to alloys of this system having silver contents between 1 and 3 per cent. With lower and higher silver contents the crystal structure rapidly becomes coarser. A further advantage is the light color and clean appearance of welded or soldered joints formed with alloys of this composition.

While the best results are obtained when the silver content is between 1 and 3 per cent and the phosphorus content is between 7 and 8.5 per cent—and preferably between 7.5 and 8 per cent—a wider range of phosphorus contents produces useful results. For example, phosphorus contents as high as 9 per cent and as low as 6 or even 5 per cent, with silver contents of 1 to 3 per cent, are useful in copper base welding alloys, but the fluidity and penetrating effect of the alloy decrease as compared with alloys having the preferred composition.

All of the alloys within the stated composition limits produce strong welds, but are sufficiently ductile to be readily peened or dressed. Furthermore, because of their relatively low silver content they can be produced at a cost which is not prohibitive.

The application of these alloys is simply and easily effected with any of the ordinarily employed welding, brazing or soldering methods. Articles or edges to be joined are positioned adjacent one another and my alloy is supplied to the joint in molten condition, with or without use of a flux. After solidification of the alloy a strong joint is produced, substantially free from scale and requiring little or no dressing. The alloys of the above stated composition can be used with good results in joining substantially all of the commercially useful metals, as well as for brazing and filling.

My invention has been described hereinabove with special reference to certain practices and embodiments which are now considered advantageous, but may be otherwise embodied and practiced within the scope of the appended claim.

I claim:

An alloy comprising 7 to 8.5 per cent phosphorus, 1 to 3 per cent silver, and the balance substantially all copper amounting to 88 to 92 per cent, said alloy being characterized by high fluidity at temperatures near its melting point, and by fine crystal structure and light color in the as-cast condition.

ALPINE R. MacGREGOR.

[fol. 343] IN THE SUPREME COURT OF PENNSYLVANIA, WESTERN DISTRICT, MARCH TERM, 1944

No. 124

WESTINGHOUSE ELECTRIC AND MANUFACTURING COMPANY

v.

ALPINE MACGREGOR, Appellant

Appeal from the Judgment and Order of the Court of Common Pleas of Allegheny County at No. 1776, April Term, 1942

DOCKET ENTRIES

January 31, 1944, Appeal and affidavit filed and writ exit.

Decree Requiring an Account

February 1, 1944, Appearance for appellee filed.
March 6, 1944, Assignments filed.
March 13, 1944, Stipulation for continuance to week of April 10, 1944, at Philadelphia, filed.
March 13, 1944, Transferred to Philadelphia.
March 28, 1944, Stipulation as to printing, filed.
March 30, 1944, Record and Exhibits filed.
March 30, 1944, Extra envelope of Exhibits filed and placed with Record.
April 18, 1944, Argued 149.

DECISION

June 30, 1944

The judgment in the nature of a decree is affirmed; costs to be paid by the appellant.

Maxey, C. J.

July 12, 1944, Praecipe for certification of transcript of record to United States Supreme Court filed.

APPEARANCES

For Appellant: William B. Jaspert.
For Appellee: Wm. Booth, Jo Baily Brown.

[fol. 344] IN SUPREME COURT OF PENNSYLVANIA

Assignments of Error

1. The Court erred in its first conclusion of law that MacGregor's copper, phosphorous, tin is within the scope of claims 1, 2, 3 and 4 of Jones patent No. 1,651,709 and therefore comes under the terms of the license agreement which said conclusion, the exception thereto and the ruling of the court thereon are found at pages 267 a, 278 a, and 309 a duly enclosed in brackets as required by rule 36.

2. The Court erred in its second conclusion of law that MacGregor's copper-phosphorus-silver solder is within the scope of claims 1, 2, 3 and 4 of the Jones Patent No. 1,651,709, and therefore comes under the terms of the license agreement, which said conclusion, the exception thereto and the ruling of the court thereon are found at pages 267 a, 278 a, and 310 a and duly enclosed in brackets.

3. The Court erred in its third conclusion of law that under the terms of the license agreement, MacGregor is obligated to account for all of the licensed solders that he has made and sold since November 16, 1937, and to pay royalty thereon as specified in the said license, which said conclusion, the exception thereto and the ruling of the court thereon are found at pages 267 a, 278 a, and 312 a and duly enclosed in brackets.

[fol. 345] 4. The court erred in its fourth conclusion of law that plaintiff is entitled to an accounting to determine the amount of licensed solder that has been sold by MacGregor since November 16, 1937, upon which royalty has not been paid, which said conclusion, the exception thereto and the ruling of the court thereon are found at pages 267 a, 278 a, and 312 a, and duly enclosed in brackets.

5. The court erred in its fifth conclusion of law that the license agreement Exhibit 2 does not obligate MacGregor to fix resale prices of the licensed solder, which said conclusion, the exception thereto and the ruling of the court thereon are found at pages 267 a, 279 a, and 312 a, and duly enclosed in brackets.

6. The court erred in its sixth conclusion of law that since the price-fixing clauses (5 and 6) of the license contract have not been asserted in this suit, any challenge by defend-

ant of the legality and enforceability thereof raises moot issues, which said conclusion, the exception thereto and the ruling of the court thereon are found at pages 267 a, 279 a, and 312 a, and duly enclosed in brackets.

7. The court erred in its seventh conclusion of law that since the Jones patent is presumptively valid, the price-fixing clauses 5 and 6 of the license agreement are presumptively legal, which said conclusion, the exception thereto and the ruling of the court thereon are found at [fol. 346] pages 268 a, 279 a, and 313 a, and duly enclosed in brackets.

8. The court erred in its eighth conclusion of law that the case of *Jefferson v. Sola*, 63 S. C. 172, does not give defendant a right, under the pleadings and facts of this case, to challenge validity of the price-fixing clauses 5 and 6 of the license agreement, which said conclusion, the exception thereto and the ruling of the court thereon are found at pages 268 a, 279 a, and 313 a, and duly enclosed in brackets.

9. The court erred in its ninth conclusion of law that defendant, being a licensee, and the price-fixing clauses of the license not being in suit, is estopped to attack the validity of the patent under which he is licensed, which said conclusion, the exception thereto and the ruling of the court thereon are found at pages 268 a, 280 a, and 314 a, and duly enclosed in brackets.

10. The court erred in its tenth conclusion of law that the price-fixing clauses 5 and 6 of the contract are divisible subject matter, inserted for the benefit of the licensor as a restriction on the license granted, and even if they were *per se* illegal could be stricken out of the license with no effect on the obligation to pay royalty, which said conclusion, the exception thereto and the ruling of the court thereon are found at pages 268 a, 280 a, and 314 a, and duly enclosed in brackets.

[fol. 347] 11. The court erred in its eleventh conclusion of law that as between these parties the Jones patent No. 1,651,709 is valid, and the license agreement is legal and enforceable, which said conclusion, the exception thereto and the ruling of the court thereon are found at pages 268 a, 280 a, and 314 a, and duly enclosed in brackets.

12. The court erred in its twelfth conclusion of law that there is no support in either the pleadings or the evidence for defendant's counterclaim, which said conclusion, the exception thereto and the ruling of the court thereon are found at pages 268 a, 280 a, and 314 a, and duly enclosed in brackets.

13. The court erred in its thirteenth conclusion of law that royalties paid by defendant as shown in defendant's Exhibit O were properly paid under the license agreement, were not paid by mistake either of fact or of law, and defendant has established no right to restitution thereof, which said conclusion, the exception thereto and the ruling of the court thereon are found at pages 268 a, 281 a, and 315 a, and duly enclosed in brackets.

14. The court erred in its fourteenth conclusion of law that if there was a mistake in paying royalties on MacGregor's Copper-Phosphorus-Tin solder, it was a mistake of law and no recovery can be had thereon, which said conclusion, the exception thereto and the ruling of the court [fol. 348] thereon are found at pages 269 a, 281 a, and 315 a, and duly enclosed in brackets.

15. The court erred in its fifteenth conclusion of law that there has been no such violation of the Sherman Act (U. S. C. A. Sec. 1, *et seq.*) pleaded or proved by defendant in this case as to constitute a defense to plaintiff's suit for royalties due under the license contract, which said conclusion, the exception thereto and the ruling of the court thereon are found at pages 269 a, 281 a, and 316 a, and duly enclosed in brackets.

16. The court erred in its sixteenth conclusion of law that this court has no jurisdiction to award damages for violation of the Sherman or other Federal anti-trusts acts (U. S. C. A. Sec. 1, *et seq.*), which said conclusion, the exception thereto and the ruling of the court thereon, are found at pages 269 a, 281 a, and 316 a, and duly enclosed in brackets.

17. The court erred in its seventeenth conclusion of law that judgment should be entered ordering and directing that the defendant render an account to the plaintiff (a) for all sales of brazing solders containing tin manufactured, and since January 1, 1940, to the date of such accounting, sold by the defendant, all such solders being covered by U. S.

Letters Patent No. 1,651,709 issued by the United States Patent Office to the plaintiff as assignee, and (b) for all sales of brazing solders containing silver manufactured, and since November 16, 1937 to the date of such accounting, [fol. 349] sold by the defendant, all of same being covered by said U. S. Letters Patent No. 1,651,709; that the plaintiff have the right to inspect the books and papers of the defendant and have free access to them for that purpose; that such account be rendered by the defendant within thirty days from the date of the judgment; and that this Court retain jurisdiction over the subject matter and parties for the purpose of enforcing such judgment and any subsequent order or judgment that may be entered in the above-entitled case, which said conclusion, the exception thereto and the ruling of the court thereon are found at pages 269 a, 282 a, and 316 a, and duly enclosed in brackets.

18. The court erred in its third finding of fact that the patented solder comprises 93% copper and 7% phosphorus which said finding, the exception thereto and the ruling of the court thereon are found at pages 241 a, 271 a, and 299 a, and duly enclosed in brackets.

19. The court erred in its nineteenth finding of fact that the amount of phosphorus considered necessary to prevent oxidation in the welding of copper was less than 1% of the welding alloy and that there is nothing in the Canzler Patent No. 1,103,482 that teaches any purpose or advantage in using phosphorus in an alloy of copper-phosphorus or copper-phosphorus-silver to an extent greater than 1% of the total alloy, said finding, the exception thereto and the [fol. 350] ruling of the court thereon are found at pages 244 a, 272 a, and 301 a, and duly enclosed in brackets.

20. The court erred in its twenty-third finding of fact that there are no suggestions or teachings in the publication "Metallic Alloys" of 1913 by Gulliver (Defendant's Exhibit H) of a solder made from copper and phosphorus or that such an alloy could be used, or would be useful as a solder which said finding, the exception thereto and the ruling of the court thereon are found at pages 245 a, 272 a, and 302 a, and duly enclosed in brackets.

21. The court erred in its twenty-fifth finding of fact that the file history of the Jones patent shows that Jones did not claim that he had invented a copper-phosphorus alloy *per se*

and that he described as his invention the discovery that a copper-phosphorus alloy in which the phosphorus was preferably between 6% and 9% of the total, makes a solder that has advantages over the solders that had been known and used in the prior art for the purpose for which his new solder is adapted, which said finding, the exception thereto and the ruling of the court thereon are found on pages 246 a, 272 a, and 302 a, and duly enclosed in brackets.

22. The court erred in its thirtieth finding of fact that MacGregor was never required under the license contract or otherwise to fix resale prices on licensed solder sold by him which said finding, the exception thereto and the ruling [fols. 351-352] of the court thereon are found at pages 247 a, 273 a, and 303 a, and duly enclosed in brackets.

23. The court erred in its thirty-first finding of fact that payments made by MacGregor on his copper-phosphorus-tin solder were not made on any mistake of fact which said finding, the exception thereto and the ruling of the court thereon are found on pages 247 a, 273 a, and 303 a, and duly enclosed in brackets.

24. The court erred in entering judgment in favor of the plaintiff and against the defendant as follows: (331 a)

> "And now, to wit, January 24, 1944, exceptions ex parte defendant to findings of fact, conclusions of law, and order of court are dismissed.
>
> "The Prothonotary is directed to enter judgment ordering and directing that the defendant render an account to the plaintiff (a) for all sales of brazing solders containing tin manufactured, and, since January 1, 1940, to the date of such accounting, sold by the defendant, all such solders being covered by U. S. Letters Patent No. 1,651,709 issued by the United States Patent Office to the plaintiff as assignee, and (b) for all sales of brazing solders containing silver manufactured, and, since November 16, 1937, to the date of such accounting, sold by the defendant, all of same being covered—

. . . . . .

[fol. 353] IN THE SUPREME COURT OF PENNSYLVANIA, WESTERN DISTRICT, MARCH TERM, 1944

No. 124

WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY, a Corporation, Plaintiff,

vs.

ALPINE MACGREGOR, Defendant-Appellant

Appeal from the Judgment and Order of the Court of Common Pleas of Allegheny County at No. 1776, April Term, 1942

OPINION OF THE COURT—Filed June 30, 1944

MAXEY, C. J.:

Plaintiff sued the defendant for an accounting and payment of royalties alleged to be due under a patent license contract dated November 16, 1937. The defendant in his answer asked to have the contract declared illegal, the patent invalid, and as a counter-claim sought recovery both of the royalties which have been paid and of damages allegedly arising under federal law.

The basic question in this case is well stated by the plaintiff-appellee as follows: "Did the trial court err in its holding that where a licensor sues to recover accrued royalties under a patent license contract which contains a clause requiring licensee to maintain licensor's prices for the patented product (such clause, however, not being in suit or observed by licensee), defendant can not attack legality of the agreement as a whole by asserting invalidity of the licensed patent?" Appellee adds: "This question arises only because of a recent decision by the U. S. Supreme Court." (That decision was in the case of Sola Electric Company v. Jefferson Electric Company, 317 U. S. 173). Appellee then says: "That case raises this question: Does the Sola case remove all estoppel of a licensee to attack validity when the license contract provides for price fixing?"

The trial court did not pass on the validity of the patent. Appellee concedes that if failure to pass on the validity of [fol. 354] the patent was error, a new trial should be or-

dered and no other question need be decided in this court. If it was not error, then only the correctness of the decision of the trial court on the merits of the questions necessary to its judgment is involved. These questions are:

A. Does defendant's copper-phosphorus-tin solder come within the scope of the licensed patent?

B. Does defendant's copper-phosphorus-silver solder come within the scope of the licensed patent?

C. If the defendant's copper-phosphorus-tin solder does not come within the scope of the patent, can licensee recover the royalties he has paid under the license on such solder?

This last question does not apply to the copper-phosphorus-silver solder for no royalty has ever been paid on it.

For several years prior to May 31, 1936, the defendant, MacGregor, was an employee of Westinghouse, and as such, became familiar with the composition and uses of a copper-phosphorus hard solder ("CP") then being made, used, and sold by the Westinghouse Company, and described in its Jones patent[1] #1,651,709. Immediately after leaving Westinghouse, MacGregor commenced the manufacture and sale of a hard solder like that made by Westinghouse, except for the addition of one-half of one per cent (.5%) of tin ("CPT"). Westinghouse sued MacGregor in the U. S. District Court, for infringement of its Jones patent, and this suit was settled by MacGregor's accepting from West-

[1] The "application" for the patent "claims" as an "invention": "1. * * *, 2. A brazing solder having a melting point between 700° and 900° C. containing phosphorus and copper as the main and essential constituents thereof., 3. * * *, 4. A solder comprising copper and phosphorus as the main and essential constituents thereof, the ratio of copper to phosphorus in said solder being greater than 4 to 1. 5. A method of uniting objects of copper which comprises placing an alloy containing copper and 6 to 9% of phosphorus there-between and heating said objects to a temperature sufficient to form alloys of copper and phosphorus with said objects. 6. * * *.

inghouse the license involved in this case. He paid royalties under it for four years in accordance with its terms, [fol. 355] Some time after execution of the license contract MacGregor put on the market a solder comprising approximately 90.5% copper, 7.5% phosphorus and 2% silver ("CPS"). When Westinghouse heard of this new solder it demanded payment of royalties thereon, and an examination of the books to determine the amount of sales thereof that had been made. MacGregor refused access to the books, and refused to pay royalty on this CPS solder. At the same time, he decided to pay no further royalties upon the CPT solder, and demanded repayment of the royalties that had been made by mistake. In addition he now asks for damages in an unstated amount upon an unstated cause of action under the Sherman Anti-Trust Act (U. S. C. Title 15, Secs. 1 and 2).

The present action was brought in the Court of Common Pleas of Allegheny County to recover the royalties due and unpaid upon the MacGregor licensed solders. Having been refused access to the licensee's books, and therefore not knowing the amounts of licensed solders that had been sold without payment of royalties thereon, the plaintiff prayed for an accounting to determine the amount of such sales, and consequently the amount of royalties due.

MacGregor filed a motion to dismiss the suit on the ground that the Court of Common Pleas had no jurisdiction to pass on the validity or scope of a United States patent. At the same time he filed a declaratory judgment suit in the United States District Court at Pittsburgh, asking that the patent be declared invalid and the license contract illegal.

The motion to dismiss in Common Pleas Court was denied, that Court holding that it has jurisdiction because the cause of action is the recovery of royalties under a contract between citizens and residents of Allegheny County. It ordered the accounting plaintiff prayed for. This appeal followed.

The first question for us to decide is whether the Sola case, supra, removes the estoppel ordinarily on a licensee [fol. 356] to attack the validity of a patent when the license contract provides for price-fixing. Appellant contends that the Sola case furnishes him with an exception to the general rule against a licensee's attacking the validity of the li-

censed patent. The license he has does contain price-fixing clauses.[2]

The argument of appellant is that since the license contains price-fixing clauses, that fact of itself gives him a right to assert the invalidity of the patent, thereby to establish unenforceability of any part of the contract, thereby to escape payment of the accrued royalties he has contracted to pay.

In the Sola case the Jefferson Electric Company had licensed the Sola Electric Company to manufacture and sell [fol. 357] products under the former's patent, and required it to maintain the prices established by the Jefferson Company for its sale of the patent products and required Sola to pay royalty on the licensed products.

After having operated under the license for a considerable period, the licensee refused to pay royalty on certain

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[2] Section 5 and 6 of the license provides as follows:

5. Westinghouse grants this license on the express condition that the prices, terms and conditions of sale for use or sale in the United States of America, its territories and possessions of brazing solders embodying the invention covered by said Letters Patent and so long as such brazing solders continue to be covered by said patent, shall be no more favorable to the customer than those which from time to time Westinghouse establishes and maintains for its own sales of similar or competing brazing solders under such patent to such or other similarly situated customer purchasing in like quantities. MacGregor shall be notified of all such prices, terms and conditions of sale fixed by Westinghouse.

The prices, terms and conditions of sale of Westinghouse may be changed by Westinghouse from time to time, notice being given MacGregor, but not less than five days' notice shall be given before any such change shall go into effect.

6. It is agreed that it shall be regarded as an evasion of this agreement amounting to a breach thereof for MacGregor to reduce Westinghouse's sale price or alter Westinghouse's selling terms and conditions of sale directly or indirectly either through its own organization, its agents or others by any device, subterfuge or evasion or by any means whatever or to make the prices lower or the terms or conditions more favorable than those set forth by Westinghouse.

of the licensee products and refused to maintain licensor's prices on those products, its reason being that the claims of the patent covering those products had been held invalid by the Sixth Circuit Court of Appeals in *France* v. *Jefferson*, 106 F. (2d) 605.

The Jefferson Electric Company then sued the licensee to recover the royalties withheld, and also for an injunction restraining the licensee from selling licensed products at prices below these established by the licensor. The Circuit Court of Appeals for the Seventh Circuit affirmed the District Court's order dismissing the counter-claim, 125 F. (2d) 322, ruling that petitioner, having accepted a license under the patent, was estopped to deny its validity. And treating the patent as valid it held the stipulation for control of the sales price of the patented articles manufactured by the licensee was a lawful exercise of the patent monopoly.

Upon certiorari to the U. S. Supreme Court, that court said: "The question for our decision is whether a patent licensee, by virtue of his license agreement, is estopped to challenge *a price-fixing clause* in the agreement by showing that the patent is invalid, and that the price restriction is accordingly unlawful because not protected by the patent monopoly (italics supplied). * * * Here a different question is presented [i. e., different from the question presented in *U. S.* v. *Harvey Steel Co.*, 196 U. S. 301]—whether the doctrine of estoppel as invoked below is so in conflict with the Sherman Act's prohibition of price-fixing that this Court may resolve the question even though its conclusion be contrary to that of a state court." The Court then declared "Such a restriction on the price of articles entering interstate commerce [as was imposed by the license contract in that case] *is* a violation of the Sherman Act save only as it is within the protection of a lawfully granted patent monopoly" (citing cases). "Agreements fixing the competitive sales price of articles moving interstate, not within the protection of a patent, are unlawful because [fol. 358] prohibited by the Sherman Act." In that case the validity of a price-fixing clause in the license agreement was challenged and that challenge could not be adjudicated by the Court until it first determined the validity of the patent, for only a valid patent could stand between that clause and its being adjudged as a violation of the Sherman Act. In that case the suit was to recover royalties withheld and also

for an injunction restraining the Sola Company from selling licensed products at prices below those established by the licensor. In the instant case the issue is not whether the price-fixing clause is in violation of the Sherman Act. It is before the court as a matter of defence to a contract for royalties which had accrued. Defendant asserts the right to attack the validity of a patent because the agreement licensing him to make, use and sell that patent (Jones Patent No. 1,651,709) during a certain term contains a price-fixing clause. We reject, as did the court below, the contention of MacGregor, the defendant, that the presence of a price-fixing clause in a patent-license greement gives the licensee the right to attack the validity of the patent, regardless of whether the price-fixing clause is involved in the litigation to recover royalties.

If the Sola case is to be given by the courts the sweeping interpretation the defendant gives it, the validity of every patent in the land would under circumstances akin to those we have here, be subject to collateral attack in any court. The Court below aptly said: "In the instant case the court has not been requested either directly or indirectly to require MacGregor to maintain Westinghouse prices. By his own testimony he has not maintained them. The price-fixing clause is not in issue. It is raised merely as a defense to a suit for accounting and payment of accrued royalties. The legality, the enforceability of the price-fixing clause is a moot question. We therefore do not propose to declare the Jones patent invalid. Whether the price-fixing clause in the license is legal or invalid is not before this Court. It is our judgment that the decision of the Sola case does not control or determine the instant case."

It is clear that if the plaintiff was attempting to force the defendant to perform acts which would be violative of Federal laws *unless those acts were legitimatized by being* [fol. 359] *done under the protection of a United States patent,* it would be necessary for the adjudicating court to determine at the outset the validity of the patent whose protection was invoked. An estoppel whose operation will result in a contravention of Federal Anti-Trust laws is outside the pale of judicial recognition. It follows that when an estoppel is invoked and the opposing party alleges that its application is inconsistent with a Federal law it becomes the duty of the tribunal to determine every fact which is

relevant to the issue thus raised. The validity of any "protective" patent invoked by the propounder of the estoppel becomes such a determinative "fact."

In the instant case the plaintiff is not attempting to enjoin the defendant from selling the products he is licensed to sell, at prices less than those charged by the licensor. To grant the relief prayed for here does not result in anything which is interdicted by the Federal Anti-Trust laws. Therefore, the decision in the Sola case, supra, does not govern the decision of any issue raised in this case.

The next question to be decided is the one identified as "A" in the third paragraph of this opinion. As to this question, the court below found certain facts which showed that there was no substantial difference between plaintiff's patented solder and "the copper-phosphorus-tin solder" as made and sold by MacGregor.[3] The court below found: (15) "• • • They are used and are interchangeable for the same purposes, by the same customers, for the same jobs." From the facts found by the court below on competent and sufficient evidence,[4] the court reaches the

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[3] This is the solder MacGregor was making when he was sued in Federal Court by the plaintiff for infringement of its "Jones patent." The suit was dismissed when MacGregor agreed to take the license involved in this Federal suit. Under the terms of that license, MacGregor agreed to pay a royalty of 10% of the sales price on solder made and sold by him which embodied the invention covered by the Jones patent. He paid $6000 royalty on this solder and then declined to pay further royalties.

[4] The solder made under the "Jones patent" consists of practically 73% copper and 7% phosphorus. The "competiting" MacGregor solder consists of approximately 92.25% copper, 7.25% phosphorus and .5% tin. The main and essential ingredients "are phosphorus and copper." MacGregor admitted that if the tin which in the amount of ½ of 1% he puts in the solder was omitted from that solder there would be "left a good workable solder." Walter A. Graham, "a non-ferrous metallurgist" of the plaintiff company testified that "he had occasion to use and see used for practical soldering operations, the three solders, namely, the Westinghouse phos-copper and the MacGregor phos-copper tin and the MacGregor phos-copper silver solder." When

[fol. 360] correct legal conclusion No. 1 that "MacGregor's copper-phosphorus-tin solder is within the scope of claims 1, 2, 3, and 4 of Jones patent No. 1,651,709 and therefore comes under the terms of the license agreement."

As to the question identified as B in the third paragraph of this opinion, the court below on competent evidence found certain facts showing that there was no substantial difference between defendant's copper-phosphorus-silver solder and the patent owned by the plaintiff. The 11th finding of fact reads as follows: "The MacGregor copper phosphorus silver allooy comprising 90.5% copper, 7.5% phosphorus and 2% silver comes within the copper phosphorus range of the original claims filed in the Jones application for solder containing less than 10% or from 6 to 9% phosphorus, * * *" The court's opinion pertinently states: "It is well settled patent law that the addition of minor ingredients, not included in the claims, which do [fol. 361] not change the characteristics or alter the functional effects of the patented composition, will not avoid infringement.

Crozier-Straub v. Graham, 28 F. (2d) 321, 325.
Lampus v. Crozier-Straub, 41 F. (2d) 746."

From the well supported findings of fact of the court below, the second conclusion of law logically follows. It reads: "MacGregor's copper-phosphorus-silver solder is within the scope of claims 1, 2, 3, and 4 of the Jones Patent

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asked to tell "what differences there are in operating results in soldering with the Westinghouse phos-copper solder as compared with the MacGregor phos-copper tin solder," he answered: "In our experience we have not been able to find any noticeable difference of the three, the Jones and the two MacGregor solders. They are interchangeable for use in the same purpose and application." He was asked, "What has been your observation as to whether or not the addition of tin to the phos-copper solder by MacGregor has changed the characteristics of the phos-copper solder without tin?" The answer is "There is no observable difference in the practical application." He was then asked: "These two solders could be interchanged for the ordinary use for which each is designed?" He answered: "That's right."

No. 1,651,709, and therefore comes under the terms of the license agreement."

Since the court found on legally sufficient evidence that the defendant's copper-phosphorus-tin solder and also the defendant's copper-phosphorus-silver solder come under the Jones patent owned by the plaintiff, and since the court properly found that the patent-license agreement is legal, it follows that its conclusions of law that (3) "Under the terms of the license agreement, MacGregor is obligated to account for all of the licensed solders that he has made and sold since November 16, 1937, and to pay royalty thereon as specified in the said license," and (4) "Plaintiff is entitled to an accounting to determine the amount of licensed solder that has been sold by MacGregor since November 16, 1937, upon which royalty has not been paid," must be sustained.

Since we have determined that the decision in the Sola case does not preclude the plaintiff's invoking the doctrine of estoppel, we could base our present judgment on the principle that a licensee cannot challenge the validity of a patent which is the subject of a license which he has accepted to sell or use that patent.

In *Headley v. Barber Asphalt Co.*, 292 F. 119, the U. S. Third Circuit Court of Appeals said at page 120: "So long as the defendant enjoyed the benefit of the license agreement, manufactured and sold under the presumably valid patent, it must pay the stipulated royalties in question, all of which became due before the application for a reissue was filed, *whether the patent was valid or invalid.*"

In *Angier v. Eaton, Cole & Burnham Co.*, 90 Pa. 594, this court referred to "The recognized principle applicable to such (patent) licenses is that while the patent is apparently valid and the license- is enjoying the benefit of its supposed validity, he is bound to pay the stipulated royalty, and can [fol. 362] not set up as a defence the actual invalidity of the patent; * * *"

See also Patterson's Appeal, 99 Pa. 521; *Kinsman v. Parkhurst*, 59 U. S. 289 and Walker on Patents, sec. 307.

The defendant also makes a counter-claim for royalties allegedly paid by mistakes on the CPT solder. This counter-claim need not be considered in view of our conclusion that MacGregor's CPT solder does come within the claims of the "Jones patent." If we had decided that it did not

come within the "Jones patent," the mistake the defendant made in paying royalties on it would be on- of law and not of fact. Therefore, it would not justify recovery of any payments made under that mistake.[5]

The defendant also asks for an unspecified amount of damages because of the plaintiff's alleged violation of the Sherman Act.[6] At the trial the court excluded evidence relating to this claim for the reason that Section 7 of the Sherman Act gives sole jurisdiction in the matter of such [fols. 362-364] a claim for damages to the Federal courts. The action of the trial judge in sustaining the objection made by plaintiff's counsel to offer testimony showing the damages to the defendant's business with the result of the enforcement of the price fixing clause under the license agreement, by Westinghouse was proper.

Further discussion of this case is not required. This case was well tried by Judge Soffel of the court below.

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[5] See *Dampskibs Aktieselskabet Thor v. Tropical Fruit Co.*, 281 F. 740, 743; *Fink v. Farmers Bank*, 178 Pa. 154; *Clark v. Lehigh*, 250 Pa. 304; *Shields v. Hilehman*, 251 Pa. 455; *Miners & Merchants Bank Case*, 313 Pa. 118.

[6] Shortly after the present litigation was begun MacGregor filed a suit for a declaratory judgment in the District Court for the Western District of Pennsylvania praying for an injunction against the enforcement of the license agreement alleging, inter alia, its illegality as being violative of the Anti-trust laws. In that case reported in 45 F. Supp. 236, Judge Gibson said: "The facts alleged in the complaint show the owner of a patent entered into a license agreement with complainant wherein one of the conditions was that the latter would observe the same sale prices as the owner of that patent. In other words, the patentee qualified the release of his lawful monopoiy. This does not constitute a violation of the Anti-trust laws, * * *" MacGregor now contends that if the Sola case had been decided by the United States Supreme Court before Judge Gibson's opinion was written, instead of being decided as it was more than seven months later, "the court's view on the question of whether or not the price fixing provision is in violation of the Anti-trust laws would be modified." We do not agree with the defendant's contention.

The adjudication is comprehensive, the findings of fact are based on competent evidence and the legal conclusions are sound.

The judgment in the nature of a decree is affirmed; costs to be paid by the appellant.

Clerk's and Judge's Certificates to foregoing transcript omitted in printing.

[fol. 365] **Supplemental Record**

IN THE COURT OF COMMON PLEAS OF ALLEGHENY COUNTY, PENNSYLVANIA, APRIL TERM, 1942

No. 1776

COMMONWEALTH OF PENNSYLVANIA,
County of Allegheny, ss:

WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY, a Corporation,

v.

ALPINE MACGREGOR

ADDITIONAL APPEARANCE DOCKET ENTRIES

January 31, 1944 Certiorari in appeal Ex parte Deft. to Supreme Court filed.

February 1, 1944 Notice and acceptance of Service filed.

January 24, 1944 Judgment entered in favor of the Plff. and against the Deft. in conformity with the order of Court made and entered January 24, 1944.

October 24, 1944 Remitter from Supreme Court, showing: The Judgment in the nature of a decree is affirmed; costs to be paid by the appellant. Eo-die, Exemplification filed.

January 22, 1945 Certificate for Supreme Court filed showing January 17, 1945 Motion to vacate order of January 10, 1945 for Supplemental Certiorari and to hold the [fol. 366] record in Supreme Court filed. (Order) The record is remitted to the Court below for further appropriate proceeding in the case.

January 31, 1945 Stipulation of Account filed.

January 31, 1945, It is ordered, adjudged and decreed as follows: That the plaintiff do recover of the defendant the sum of Fifteen Thousand Four Hundred Eighty-five and 96/100 Dollar $15485.96. That the plaintiff do recover of the defendant the costs of this suit to be taxed. That the plaintiff have execution for the sums herein decreed to be paid.

March 1, 1945 Agreement to open Judgment filed.

March 2, 1945 Testimony filed.

March 2, 1945 Plaintiff request for finding of Fact and conclusion of Law. Eo die Defendant request for finding of Fact and conclusion of Law. Eo die Finding of Fact, Discussion, Conclusion of Law and Court order. The Prothonotary of the Court is directed to give forthwith to the parties or their Attorneys notice of this decision, and if no exceptions thereto are filed in said Prothonotary's office within thirty (30) days after service of such notice. Judgment shall be entered by the said Prothonotary in favor of Plaintiff and against the Defendant in the sum of $15485.96 cost to be paid by the Defendant.

March 5, 1945 Proof of service of notice of Court Order filed.

[fol. 367] March 9, 1945 Exceptions to finding of fact, conclusions of Law and Order of Court dated March 2, 1945 showing service accepted by Atty. for Plff. Eo die Praecipe for Argument list filed, acknowledged by Atty. for Plff. filed.

March 14, 1945 Testimony filed.

March 29, 1945, Defendant's exceptions to findings of fact, conclusions of Law and order of Court dated March 2, 1945, are dismissed, and judgment is entered in favor of the plaintiff and against the defendant in the sum of $15,485.96. Costs to be paid by defendant. Eo die Exception noted to defendant and bill sealed. Eo die opinion filed.

April 12, 1945, Certiorari ex parte Defendants to Supreme Court filed.

April 16, 1945, Notice of Appeal and Acceptance of Service filed.

From the Record.

David B. Roberts, Prothonotary. By: S. A. Fritz, Deputy. (Seal.)

[fol. 368] IN COURT OF COMMON PLEAS

STIPULATION OF ACCOUNT—Filed January 31, 1945

It is stipulated by and between the parties to this suit, by their respective counsel, that the account owing by defendant to the plaintiff, pursuant to the decree and order of Court dated January 24, 1944, is in the sum of Fifteen Thousand Four Hundred Eighty-five and 96/100 Dollars ($15,485.96), and that this stipulation be entered of record in this cause in lieu of a statement of account.

Smith, Buchanan & Ingersoll, William Booth, Counsel for plaintiff. William B. Jaspert, Counsel for Defendant.

Pittsburgh, Pa. January 31, 1945.

IN COURT OF COMMON PLEAS

FINAL JUDGMENT—Filed January 31, 1945

And Now, to wit, January 31, 1945, this cause having come on to be heard upon defendant's account pursuant to the decree and order of this Court of January 24, 1944, and having been argued by counsel, it is, upon consideration thereof, Ordered, Adjudged and Decreed as follows:

(1) That the plaintiff do recover of the defendant the [fol. 369] sum of Fifteen Thousand Four Hundred Eighty-five and 96/100 Dollars ($15,485.96).

(2) That the plaintiff do recover of the defendant the costs of this suit to be taxed.

(3) That the plaintiff have execution for the sums herein decreed to be paid.

By the Court. S.

Form of judgment approved:

Smith, Buchanan & Ingersoll, William Booth, Counsel for Plaintiff. William B. Jaspert, Counsel for Defendant.

In Court of Common Pleas

Agreement to Open Judgment—Filed March 1, 1945

Whereas on January 31, 1945, a stipulation of account, approved by counsel for both plaintiff and defendant, was filed in the above case; and

Whereas thereupon on January 31, 1945, a judgment was entered in the above case in favor of plaintiff and against defendant in the sum of $15,485.96; and

Whereas the parties desire that upon the terms and conditions hereinafter set forth said judgment be opened and [fol. 370] said stipulation be vacated and cancelled at defendant's request and in order to let defendant raise the defenses hereinafter referred to;

Now, to wit, this 20th day of February, 1945, it is stipulated and agreed by and between the parties to this case, by their respective counsel, that subject to the Court's approval, the aforesaid stipulation of account dated January 31, 1945, be vacated and cancelled and the aforesaid judgment of January 31, 1944, be opened, that there may be offered in evidence by plaintiff's counsel as the statement of account in this case required by the order and judgment of January 24, 1944, the letter of December 15, 1944, signed by the defendant and addressed to plaintiff, a copy of which is attached hereto, made part hereof and marked Exhibit "A", that the defendant shall have the right to object to such account solely on the ground that the Jones patent is invalid and that the license agreement sued upon is therefore in violation of Federal law so as to constitute a defense to plaintiff's suit for royalties due, and that to effectuate the foregoing stipulation the parties, by their respective counsel, shall promptly request the Court that a hearing be held, jury trial being waived.

Smith, Buchanan & Ingersoll, by William Booth, Counsel for Plaintiff. William B. Jaspert, Counsel for Defendant.

[fol. 371] Approved this 1st day of March, 1945.

By the Court, Soffel, J., Trial Judge.

EXHIBIT "A" TO AGREEMENT

A. R. MacGregor
P. O. Box 8274

(18)
Swissvale, Pa.
December 15, 1944.

Westinghouse Electric & Manufacturing Company,
East Pittsburgh, Pa.

GENTLEMEN:

The following is an accounting of royalties in accordance with the Court's Order of January 24, 1944, in the case of Westinghouse vs. MacGregor:

Silver Alloy (MacGregor) U. S. Patent No. 2,162,627	$4,614.86
Tin Alloy (MacGregor) U. S. Patent No. 2,125,680	9,614.43
Jones Alloy (Westinghouse) U. S. Patent No. 1,651,709	1,256.67
Total	$15,485.96

Royalties were computed on all alloys through December 5, 1944.

Since no royalties were ever paid on the Silver Alloy, the accounting started with the first sale of that alloy, December, 1937.

[fol. 372] Royalties on the Tin Alloy having been paid up to and including the third quarter of 1940, the accounting started with October 1, 1940.

Royalties on the Jones Alloy having been paid through 1941, the accounting started with January 1, 1942.

Since we were instructed by Westinghouse that sales, under the agreement, to U. S. Navy on and after July 8, 1942, were to be royalty free, we have deducted the items we know to have been for Navy use on all alloys.

Yours very truly, A. R. MacGregor.

IN COURT OF COMMON PLEAS

Testimony—Filed March 2, 1945

Pittsburgh, Pa.,
Thursday, March 1, 1945.

Coram: Hon. Sara M. Soffel, J.

APPEARANCES:

William Booth, Esq., and Jo Baily Brown, Esq., for Plaintiff.
William B. Jaspert, Esq., for Defendant.

[fol. 373] OFFERS OF COUNSEL

Mr. Brown: If the Court please, you will recall that you tried this case of Westinghouse v. MacGregor and held for the plaintiff. The suit was based on a license under a patent. The case went to the Court en banc and was affirmed and went to the Supreme Court of Pennsylvania and was affirmed and an accounting ordered.

Thereafter the defendant, in lieu of going through accounting proceeding, filed a voluntary statement of the amount that would be due under the license pursuant to the Court's order, in the absence of any defense attacking the legality of the license and the validity of the patent. The parties stipulated the amount due and a judgment was entered by this Court.

Thereafter the defendant called to the attention of the plaintiff that inadvertently defendant had stipulated an agreed judgment from which apparently there would be no appeal. He requested the plaintiff to consent that that judgment be reopened so that the record could be put in such condition as to preserve his right to get a decision on appeal by the Supreme Court of Pennsylvania, from which, in his opinion, certiorari to the Supreme Court of the United States might lay.

Plaintiff, not desiring to take advantage of any technicality, has stipulated that the judgment would be opened and such a stipulation has been approved by your Honor and filed in this case.

[fol. 374] We are, therefore, before you now for the purpose of going through an accounting proceeding as required by the Order and judgment of January 24, 1944,

and by way of an accounting proceeding plaintiff offers to your Honor as plaintiff's exhibit No. 1 on accounting a statement signed by the defendant MacGregor showing royalties accrued under the contract involved in this suit, amounting to $15,485.96.

We offer this statement by the defendant as the accounting in this proceeding and ask that findings be based thereon covering the amount due the plaintiff upon the basis of this statement.

Mr. Jaspert: Defendant objects to the admission of the statement of accounting in the following particulars:

1. Under the Federal Laws in Sola Electric Co. v. Jefferson Electric Co., 317 U. S. 173, and Chicago Metallic Manufacturing Co. v. Katzinger Co., 139 Fed. 2d 291, the agreement dated November 16, 1937, under which defendant has been ordered to account, is illegal and unenforceable save only that Jones patent 1,651,709 is valid, and defendant has not had the opportunity to show that the Jones patent is invalid.

2. Defendant denies that under the Federal Laws there is owing to the plaintiff any sum for which a lawful judgment may be entered.

Mr. Booth: If your Honor please, plaintiff believes that [fol. 375] this objection should be overruled in view of the fact that these questions involved in the objection were tried by this Court and found in favor of the plaintiff and that this Court was thereupon affirmed in the matter by the Supreme Court of Pennsylvania, so that the matters involved in the objection are either res judicata or have been determined and as such are the law of the case.

The Court: Objection overruled, accounting exhibit No. 1 is received into evidence, and exception noted to the defendant.

Reporter's and Judge's Certificates to Testimony

I hereby certify that the evidence and proceedings are contained fully and accurately in the notes taken by me upon the trial of the within cause and that this is a true and correct transcript thereof.

Geo. D. Rahn, Official Reporter.

The foregoing record of the proceedings taken at the trial of the within cause is hereby approved and directed to be filed.

S. M. Soffel, Trial Judge.

[fol. 376] IN COURT OF COMMON PLEAS

Findings of Fact, Discussion, Conclusions of Law, Order of Court—Filed March 2, 1945

SOFFEL, J.:

This case is before the court for an accounting in accord with the Order of Court entered January 24, 1944.

From the testimony adduced at the hearing held for this purpose on March 1, 1945, the court makes the following

FINDINGS OF FACT

[2] [1. The amount of royalties or license fees computable under the license agreement of November 16, 1937 (plaintiff's Exhibit 2), on all sales of brazing solders containing silver manufactured, and since November 16, 1937, up to and including December 5, 1944, sold by defendant, all of same being covered by United States letters patent No. 1,651,709 issued by the United States Patent Office to the plaintiff as assignee, is $4,614.86.]

[3] [2. The amount of royalties or license fees computable under the license agreement of November 16, 1937 (plaintiff's Exhibit 2), on all sales of brazing solders containing tin manufactured, and since January 1, 1940, up to and including December 5, 1944, sold by defendant, all of same being covered by United States letters patent No. 1,651,709 issued by the United States Patent Office to the plaintiff as assignee, is $9,614.43.]

[fol. 377] [4] [3. The amount of royalties or license fees computable under the license agreement of November 16, 1937 (plaintiff's Exhibit 2), on all sales of brazing solders containing neither silver nor tin manufactured, and since January 1, 1942, up to and including December 5, 1944, sold by defendant, all of same being covered by United States letters patent No. 1,651,709 issued by the United States Patent Office to the plaintiff as assignee, is $1,256.67.]

4. No portion of the royalties or license fees aggregating $15,485.96 referred to in Findings of Fact 1, 2 and 3 has been paid by defendant to plaintiff.

5. All royalties or license fees, other than those referred to in Findings of Fact 1, 2 and 3, with respect to defendant's sale of brazing solders under the license agreement of November 16, 1937 (plaintiff's Exhibit 2) have been paid by defendant to plaintiff.

Discussion

At the hearing in the instant case the plaintiff introduced into evidence Accounting Exhibit No. 1 which sets forth the amount of royalties or license fees computable under the license agreement of November 16, 1937 (plaintiff's Exhibit 2). It is admitted by the defendant that if royalties are due, the total is the sum stated in said Accounting Exhibit.

[fol. 378] Since this court has already held that the defendant is obligated to pay royalties to the plaintiff, we are of the opinion that judgment should be entered in favor of the plaintiff and against the defendant in the sum of $15,485.96.

Conclusion of Law

[1] [The amount of royalties or license fees with respect to all brazing solders manufactured and sold by defendant and coming within the terms of the license agreement of November 16, 1937 (plaintiff's Exhibit 2), for which amount in this case defendant is bound and obligated to account to plaintiff and has accounted to plaintiff, and which amount is justly due and owing in this case to plaintiff from defendant, is $15,485.96.]

Order of Court

And now, to wit, March 2, 1945, the Prothonotary of the Court is directed to give forthwith to the parties or their attorneys notice of this decision, and if no exceptions thereto are filed in said Prothonotary's Office within thirty (30) days after service of such notice, judgment shall be entered by the said Prothonotary in favor of the plaintiff and against the defendant in the sum of $15,485.96. Costs to be paid by defendant.

By the Court. S.

[fol. 379] IN COURT OF COMMON PLEAS

EXCEPTIONS TO FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER OF COURT DATED MARCH 2, 1945—FILED MARCH 9, 1945.

And now comes defendant above named, by his attorney, and excepts to the Findings of Fact, Conclusions of Law and Order filed in the within cause, and assigns the following as error:

First

The Trial Judge erred in overruling defendant's objection to the offer in evidence of plaintiff's accounting exhibit No. 1, which objection is as follows:

> "Under the Federal Laws in Sola Electric Co. v. Jefferson Electric Co., 317 U. S. 173, and Chicago Metallic Manufacturing Co. v. Katzinger Co., 139 Fed. 2d 291, the agreement dated November 16, 1937, under which defendant has been ordered to account, is illegal and unenforceable save only that Jones patent 1,651,709 is valid, and defendant has not had the opportunity to show that the Jones patent is invalid."

Second

The Trial Judge erred in overruling defendant's second objection to the offer in evidence of plaintiff's accounting exhibit No. 1, which objection is as follows:

> "Defendant denies that under the Federal Laws there is owing to the plaintiff any sum for which a [fol. 380] lawful money judgment may be entered."

Third

[2] [The Trial Judge erred in the first finding of fact in finding that the brazing solders containing silver manufactured and sold by defendant are covered by United States Letters Patent No. 1,651,709 owned by the plaintiff.]

Fourth

[3] [The Trial Judge erred in the second finding of fact in finding that the brazing solders containing tin manufactured and sold by defendant are covered by United States Letters Patent No. 1,651,709 owned by the plaintiff.]

Fifth

[The Trial Judge erred in the third finding of fact in finding that the brazing solders containing neither silver nor tin manufactured and sold by defendant are covered by United States Letters Patent No. 1,651,709 owned by the plaintiff.]

Sixth

The Trial Judge erred in not finding that United States Letters Patent No. 1,651,709 describes a solder of copper and phosphorus described in the publication by Gulliver of 1913 entitled "Metallic Alloys" (Def. Ex. H).

[fol. 381]

Seventh

The Trial Judge erred in not finding that the file history of United States Letters Patent No. 1,651,709 shows that the original claims disclosed by the patent were rejected and canceled on the publication by Gulliver, and that the patentee admitted that the alloy described by the patent was old.

Eighth

The Trial Judge erred in not finding that claims 1 to 4 of United States Letters Patent 1,651,709, the only claims in this suit, cannot be read without including the alloy of copper and phosphorus described in the publication by Gulliver (Def. Ex. H).

Ninth

The Trial Judge erred in not finding that if claims 1 to 4 of United States Letters Patent 1,651,709 are construed to read upon defendant's tin and silver solder they will with equal force and effect read upon the disclosure of the Gulliver publication (Def. Ex. H).

Tenth

[The Trial Judge erred in concluding that all brazing solders manufactured and sold by defendant come within the terms of the license agreement of November 16, 1937 (Pltf. Ex. 2) for which defendant is bound and obligated to account to plaintiff in the amount of $15,485.96, and that [fol. 382] such amount is justly due and owing in this case to plaintiff from defendant.]

Eleventh

The Trial Judge erred in not concluding that the United States Letters Patent 1,651,709 is invalid as fully anticipated by the publication to Gulliver (Def. Ex. H).

Twelfth

The Trial Judge erred in not concluding that United States Letters Patent 1,651,709 is invalid as not claiming any invention disclosed or described in the patent.

Thirteenth

The Trial Judge erred in not concluding that United States Letters Patent 1,651,709 is invalid by the patentee's admission that the alloy described therein is old.

Fourteenth

The Trial Judge erred in not concluding that United States Letters Patent 1,651,709 is invalid as being for the same invention originally claimed and canceled during the prosecution of the application in the Patent Office.

Fifteenth

The Trial Judge erred in not concluding that the license agreement dated November 16, 1937 (Pltf. Ex. 2), containing price fixing provisions in paragraphs 5 and 6 thereof, is illegal as not supported by any valid patent.

[fol. 383]

Sixteenth

The Trial Judge erred in not concluding that the license agreement dated November 16, 1937 (Pltf. Ex. 2) is unenforceable as violating the Federal Anti-Trust Laws and that defendant is discharged from the payment of any royalties thereunder.

Seventeenth

[The Trial Judge erred in entering the following order:

"And now, to wit, March 2nd, 1945, the Prothonotary of the Court is directed to give forthwith to the parties or their attorneys notice of this decision, and if no exceptions thereto are filed in said Prothonotary's office within thirty (30) days after service of such

notice, judgment shall be entered by the said Prothonotary in favor of the plaintiff and against the defendant in the sum of $15,485.96. Costs to be paid by defendant."

Respectfully submitted, William B. Jaspert, Attorney for Defendant.]

Pittsburgh, Pa., March 9, 1945.

Service of a copy of defendant's foregoing exceptions is acknowledged this 8 day of March, 1945.

Jo. Baily Brown, Attorney for Plaintiff.

[fol. 384] IN COURT OF COMMON PLEAS

OPINION AND ORDER OF COURT—Filed March 29, 1945

Before Thompson, Soffel and Challener, JJ.

OPINION

SOFFEL, J.

This case is before the court on defendant's exceptions to Findings of Fact, Conclusions of Law, and Order entered by the Court on an accounting.

Westinghouse Electric & Manufacturing Company, a corporation, the plaintiff, brought suit to recover from Alpine MacGregor, the defendant, royalties under a patent license. The patent covers a solder comprising copper and phosphorus in certain proportions. Sued in the United States District Court for infringement of the licensed patent, the instant defendant settled that suit by taking out the license here involved. He paid royalty for several years and then refused to make further payments. Suit was then brought in this court to enforce the contract.

At the trial of the case in April, 1943, the defendant introduced evidence to show that his product does not come under the patent. The Trial Court found that the three solders manufactured by the defendant come under plaintiff's patent and are therefore within the terms of the license contract on which suit was brought. The defendant also attacked the validity of the patent under which he was licensed to make, use, and sell the solder covered by plain-
[fol. 385] tiff's patent No. 1651709 for the reason that the

contract provides defendant shall not sell the licensed solder at prices lower than those for which the plaintiff sells the patented solder. It was and is defendant's theory that the licensed patent is invalid; that therefore it furnishes no valid basis to fix prices by agreement; and that the contract is therefore as a whole unenforceable because of the federal law. It is the plaintiff's position, first, that the patent is prima facie valid, and second, that defendant, having voluntarily taken a licensed patent, in order to avoid litigation in the federal court in which the defendant was accused of infringing the patent, is estopped to deny validity of the patent so long as he operates under the license.

Evidence which defendant sought to introduce in order to attack the validity of the patent was objected to by the plaintiff on the ground that the defendant was estopped to attack the validity of the patent under which he was licensed. The objection was sustained and such proofs excluded.

On July 7, 1943 the Trial Court filed an opinion discussing the issues, made findings of fact and conclusions of law sustaining plaintiff's position on all points, and ordered an accounting to determine the amount of royalty due and unpaid. The exceptions taken by defendant were argued before a court en banc, consisting of Judges McNaugher, Richardson and Soffel. On January 24, 1944 the court en banc overruled all of defendant's exceptions and sustained the position of the Trial Court. An appeal was taken by [fol. 386] defendant to the Supreme Court of Pennsylvania. In an opinion by Mr. Chief Justice Maxey, reported in *350 Pa. 333*, the Supreme Court affirmed the decision of the Trial Court. The case was then remanded to the Court of Common Pleas for an accounting.

The defendant then voluntarily furnished plaintiff with a statement in the form of a letter admitting that under the terms of the licensed contract royalty due and unpaid amounted to $15,485.96. A hearing was had before the original Trial Judge. The statement of defendant was offered in evidence. Defendant admitted that if anything were payable the amount due was the sum of $15,485.96, but objected to receipt of the evidence on accounting and to entry of any judgment on the ground that the licensed contract is illegal under federal law and therefore no payment should be required of defendant. Defendant's objections were overruled.

On March 2, 1945 the Court filed findings of fact, discussion, conclusions of law, and an order directing the Prothonotary to enter judgment in favor of the plaintiff and against the defendant in the sum of $15,485.96. Defendant's exceptions to this adjudication are now before the instant court.

It is our opinion that the exceptions are without merit and should be dismissed. They are directed to matters ruled upon previously in this litigation by the Trial Court, and have been affirmed by a court en banc and by the Supreme Court of Pennsylvania. So far as the instant proceeding is concerned, they are res judicata as to all issues previously [fol. 387] considered and acted upon. The only thing the defendant could attack in the instant proceeding is the amount due or the procedure on accounting to determine the amount. The only issue before the court in the instant proceeding is, How much does the defendant owe the plaintiff?

The defendant voluntarily furnished to plaintiff a statement of account, the accuracy of which is not questioned by either party, and since no question of procedure in arriving at that amount has arisen, it is obvious that no justiciable issue is involved in this case at this time. The defendant here reiterates the position taken originally before the Trial Court that the licensed contract is unenforceable because it contains a price-fixing clause and because the patent is invalid. These matters were previously determined and are not germane to the issue.

The first exception is directed to alleged error in overruling defendant's objection to the offer in evidence of plaintiff's accounting, Exhibit No. 1. The objection is not predicated upon any question of authenticity or amounts stated to be due. The objection simply states again defendant's original position that the agreement under which defendant has been ordered to account is illegal and unenforceable and the patent invalid. This position has been found untenable by this Court and by the Supreme Court of Pennsylvania. In the absence of an attack on the account as stated, the Trial Court was bound to receive it into evidence and to proceed with the accounting in accord with the [fol. 388] prior decisions and mandate of the Supreme Court. Exception Dismissed.

The second exception is directed to alleged error in overruling defendant's second objection to the offer in evidence of plaintiff's accounting, Exhibit No. 1, for the reason that under the federal laws there is not owing to the plaintiff any sum for which a lawful judgment may be entered. This exception is nothing more than a reiteration of the legal position that has been adjudicated adversely to the defendant in this court and the Supreme Court of Pennsylvania. No question of procedure is here raised. Exception Dismissed.

[2, 3, 4] [The third, fourth, and fifth exceptions are predicated upon defendant's position that the three forms of solder manufactured by him do not come under the licensed patent of the plaintiff. These exceptions raise again questions ruled upon in the prior litigation. No new matter of any kind bearing upon them has been presented in this accounting. Third, Fourth, and Fifth Exceptions Dismissed.]

The sixth, seventh, eighth, and ninth exceptions are advanced to attack the validity of the licensed patent on the basis of a publication (Gulliver) that was in evidence originally before the Trial Court. Defendant's position was held untenable at that time. The Trial Court was affirmed by the Supreme Court on this matter. The question raised by these exceptions is not part of the accounting proceeding. Sixth, Seventh, Eighth, and Ninth Exceptions Dismissed.

[fol. 389] [The tenth exception refers substantially to the same matter as has been raised by the third, fourth, and fifth exceptions. It includes a reference to the amount found due in the accounting proceeding, but raises no point of law regarding the quantum of the amount or the procedure by which it was determined. The exception raises nothing that has not been previously decided and brings in no new evidence or law. Exception Dismissed.]

The eleventh exception raises the same matter as has been discussed in connection with the sixth, seventh, eighth, and ninth exceptions. Exception Dismissed.

The twelfth, thirteenth, and fourteenth exceptions seek to raise the question of the validity of the licensed patent. There is nothing new in the accounting record that gives any basis for re-arguing or re-considering this question. Exception Dismissed.

The fifteenth exception goes to the merits of the case as a whole, namely, the enforceability of the contract. That was tried and determined before the accounting proceeding was held. No new evidence or matter of any kind bearing on that question has arisen in the accounting proceeding. The unenforceability of the contract cannot be raised here. Exception Dismissed.

The sixteenth exception is substantially the same as the fifteenth, except that it refers to the "federal" laws. This is a matter considered and determined adversely to the [fol. 390] defendant in the litigation prior to the accounting. There is no basis in the accounting record for rearguing this question. Exception Dismissed.

[5] [The seventeenth exception is directed to the order entered by the Trial Judge in the accounting. Since the case in the prior litigation was decided on the merits on all points for the plaintiff and against the defendant, an accounting ordered by the Supreme Court, and an accounting held, at which the amounts were supplied by the defendant himself, and no objection being raised to the manner or form of accounting and procedure by the defendant, there is no valid basis to an objection to the entry of the order of the Trial Court. Exception Dismissed.

Judgment will therefore be entered in favor of the plaintiff and against the defendant.

ORDER OF COURT

And now, to wit, Mar. 29, 1945, defendant's exceptions to Findings of Fact, Conclusions of Law, and Order of Court dated March 2, 1945, are dismissed, and judgment is entered in favor of the plaintiff and against the defendant in the sum of $15,485.96.

Costs to be paid by defendant.

By the Court. S.

Eo die exception noted to defendant and bill sealed.

Sara M. Soffel. [Seal]

[fol. 391] IN THE SUPREME COURT OF PENNSYLVANIA, WESTERN DISTRICT, MARCH TERM, 1945

No. 172

WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY

v.

ALPINE MACGREGOR, Appellant

Appeal from the Judgment and Order of the Court of Common Pleas of Allegheny County at No. 1776, April Term, 1942.

DOCKET ENTRIES

April 12, 1945, Appeal and affidavit filed and writ exit.
April 13, 1945, Appearance for appellee filed.
April 24, 1945, Petition of Appellant for leave to file ten (10) copies of volume 1 of the record and eighteen (18) copies of the supplemental record in the above-entitled case, filed.
April 24, 1945, Stipulation of counsel for transfer of cause to Harrisburg for hearing the week of May 21, 1945, and that the record and briefs be filed with the Clerk at Harrisburg, Pa., filed.
April 24, 1945, Transferred to Harrisburg.

ORDER

April 28, 1945.

The within petition is granted.

Maxey, C. J.

May 15, 1945, Record, testimony (2 vols.) and 2 books of Exhibits filed.
May 15, 1945, Assignments filed.
May 23, 1945, Argued 131.

DECISION

June 29, 1945

The judgment of the court below in favor of the plaintiff against the defendant in the sum of $15,485.96 is affirmed on the opinion of Judge Soffel, and in accordance with the opinion we heretofore filed in this case.

Per Curiam.

July 10, 1945, Remitted.

[fol. 392] ORDER

And Now, July 11, 1945, it is ordered that a Supplemental Certiorari be issued in the above entitled case and that the Prothonotary of this Court for the Western District thereof, retain the record for ninety days from this date, within which time the Appellant herein may make application to the Supreme Court of the United States for an appeal or certiorari.

Geo. W. Maxey, C. J.

July 11, 1945, Supplemental Certiorari issued.

July 11, 1945, Record, testimony (2 vols.) and 2 books of Exhibits filed.

July 11, 1945, Petition of appellant for stay of execution pending application for review on writ of certiorari and order of court, with acceptance of service, filed.

July 14, 1945, Answer filed.

ORDER

And Now, July 18, 1945, on petition of appellant for stay of execution and enforcement of the judgment and decree entered March 29, 1945, affirmed June 29, 1945, the said petition is granted and it is ordered that the execution and enforcement of the judgment or decree be stayed ninety days pending an application for review on writ of certiorari.

George W. Maxey, Chief Justice.

July 20, 1945, Certified copy of order sent to Prothonotary of Court of Common Pleas of Allegheny County.

August 13, 1945, Praecipe of defendant for certification of transcript of record to Supreme Court of the United States, filed.

For Appellee: Jo. Baily Brown, William Booth.
For Appellant: William B. Jaspert.

[fol. 393] IN SUPREME COURT OF PENNSYLVANIA

ASSIGNMENTS OF ERROR

1. The Court erred in its conclusion of law that the amount of royalties or license fees with respect to all brazing solders manufactured and sold by defendant and com-

ing within the terms of the license agreement of November 16, 1937 (plaintiff's Exhibit 2), for which amount in this case defendant is bound and obligated to account to plaintiff, and has accounted to plaintiff, and which amount is justly due and owing in this case to plaintiff from defendant, is $15,485.96, which said conclusion, exception thereto and the ruling of the Court thereon are found at pages 14 a, 17 a, and 25 a of the supplemental record, duly enclosed in brackets as required by Rule 36.

2. The Court erred in its first finding of fact that the amount of royalties or license fees computable under the license agreement of November 16, 1937 (plaintiff's Exhibit 2), on all sales of brazing solders containing silver manufactured, and since November 16, 1937, up to and including December 5, 1944, sold by defendant, all of same being covered by United States letters patent No. 1,651,709 issued by the United States Patent Office to the plaintiff as assignee, is $4,614.86, which said finding, exception thereto and the ruling of the Court thereon are found at pages 12 a, 16 a and 24 a of the supplemental record, duly enclosed in brackets.

3. The Court erred in its second finding of fact that the [fol. 394] amount of royalties or license fees computable under the license agreement of November 16, 1937 (plaintiff's Exhibit 2), on all sales of brazing solders containing tin manufactured, and since January 1, 1940, up to and including December 5, 1944, sold by defendant, all of same being covered by United States letters patent No. 1,651,709 issued by the United States Patent Office to the plaintiff as assignee, is $9,614.43, which said finding, exception thereto and the ruling of the Court thereon are found at pages 12 a, 16 a and 24 a of the supplemental record, duly enclosed in brackets.

4. The Court erred in its third finding of fact that the amount of royalties or license fees computable under the license agreement of November 16, 1937 (plaintiff's Exhibit 2), on all sales of brazing solders containing neither silver nor tin manufactured, and since January 1, 1942, up to and including December 5, 1944, sold by defendant, all of same being covered by United States letters patent No. 1,651,709 issued by the United States Patent Office to the plaintiff as assignee, is $1,256.67, which said finding, exception thereto and the ruling of the Court thereon are found at

pages 13 a, 16 a and 24 a of the supplemental record, duly enclosed in brackets.

5. The Court erred in entering judgment in favor of the plaintiff and against the defendant as follows:

> "And now, to wit, March 29, 1945, defendant's exceptions to Findings of Fact, Conclusions of Law, and [fol. 395] Order of Court dated March 2, 1945, are dismissed, and judgment is entered in favor of the plaintiff and against the defendant in the sum of $15,485.96.
>
> "Costs to be paid by defendant.
>
> Sara M. Soffel, Trial Judge.
>
> "Eo die exception noted to defendant and bill sealed.
>
> Sara M. Soffel. (Seal.),"

which judgment, exception thereto and the ruling of the Court thereon are found at pages 26 a, 19 a and 26 a of the supplemental record, duly enclosed in brackets.

[fol. 396] In the Supreme Court of Pennsylvania, Western District, March Term, 1945

No. 172

Westinghouse Electric & Manufacturing Company, a Corporation,

v.

Alpine MacGregor, Appellant

Appeal from the Order and Judgment of the Court of Common Pleas of Allegheny County at No. 1776, April Term, 1942

Opinion of the Court—June 29, 1945

Per Curiam:

The judgment of the court below in favor of the plaintiff against the defendant in the sum of $15,485.96 is affirmed on the opinion of Judge Soffel, and in accordance with the opinion we heretofore filed in this case.

Filed June 29, 1945.

Clerk's and Judge's Certificates to foregoing transcript omitted in printing.

[fol. 397] SUPREME COURT OF THE UNITED STATES

ORDER ALLOWING CERTIORARI—Filed November 5, 1945

The petition herein for a writ of certiorari to the Supreme Court of the Commonwealth of Pennsylvania is granted.

And it is further ordered that the duly certified copy of the transcript of the proceedings below which accompanied the petition shall be treated as though filed in response to such writ.

Mr. Justice Jackson took no part in the consideration or decision of this application.